TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

No. ~~398.~~ 118

CHARLES M. TREMAINE AND WILLIAM B. TREMAINE, APPELLANTS,

vs.

ALONZO HITCHCOCK, GEORGE G. SAXE, AND JAMES H. ROBERTSON.

119

No. ~~399.~~—CROSS-APPEAL.

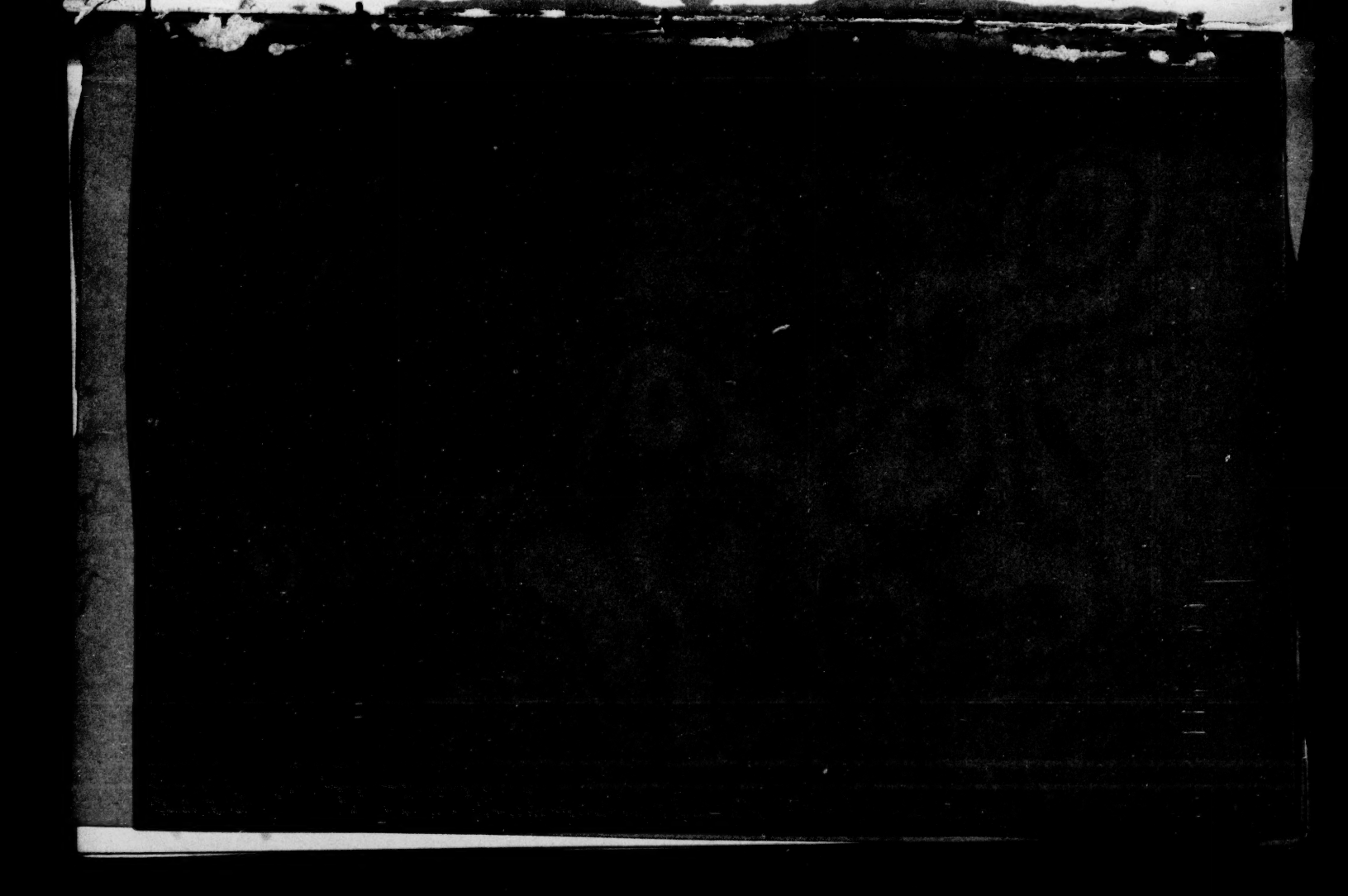
ALONZO HITCHCOCK, GEORGE G. SAXE, AND JAMES H. ROBERTSON, APPELLANTS,

vs.

CHARLES M. TREMAINE AND WILLIAM B. TREMAINE.

APPEALS FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK.

FILED JANUARY 14, 1873.



SUPREME COURT OF THE UNITED STATES.

No. 398.

CHARLES M. TREMAINE AND WILLIAM B. TREMAINE, APPELLANTS,

vs.

ALONZO HITCHCOCK, GEORGE G. SAXE, AND JAMES H. ROBERTSON.

No. 399.—Cross-Appeal.

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1 [L. S.] The President of the United States of America to Charles M. Tremaine & William B. Tremaine, greeting:

You are hereby commanded that you and each of you personally appear before the judges of the circuit court of the United States of America for the southern district of New York, in the second circuit court in equity, on the first Monday of January, A. D. 1870, wherever the said court shall then be, to answer a bill of complaint exhibited against you in the said court by Alonzo Hitchcock, George G. Saxe, and James H. Robertson, and to do further and receive what the said court shall have considered in that behalf. And this you are not to omit under the penalty on you and each of you of two hundred and fifty dollars.

Witness Hon. Salmon P. Chase, Chief Justice of the Supreme Court of the United States, at the city of New York, on the sixth day of December, in the year one thousand eight hundred and sixty-nine, and of the Independence of the United States of America the ninety-fourth.

KENNETH G. WHITE, *Clerk.*
MATHEWS & BETTS, *Sol'rs.*

The defendants are required to enter appearance in the above cause in the clerk's office of this court on or before the first Monday of January, 1870, or the bill will be taken pro confesso against them.

K. G. W., *Clerk.*

2 (Indorsed:)

Personally served on the within-named defendant, Cha's M. Tremaine, Dec. 7, 1869.

S. R. HARLOW,
U. S. Marshal.

Filed Dec. 7, 1869.

3 United States circuit court, southern district of New York.

ALONZO HITCHCOCK, GEORGE G. SAXE, AND James H. Robertson, *against* CHARLES M. TREMAINE AND WILLIAM B. TREMAINE. } In equity.

To the honorable the justices of the circuit court of the United States for the second circuit, within and for the southern district of New York, in equity:

Alonzo Hitchcock, George G. Saxe, and James H. Robertson, all of the city of New York, county of New York, and State of New York, citizens of the United States, bring this their bill against Charles M. Tremaine and William B. Tremaine, both of the city of Brooklyn, county of Kings, and State of New York.

And thereupon your orators complain and say, that heretofore and before the 27th day of June, 1865, one R. W. Carpenter, being then a citizen of the United States, was the true, original, and first inventor or discoverer of a certain new and useful invention, to wit: a "tremolo-attachment" in musical instruments, and that the said invention was not known or used by others before his invention or discovery thereof,

4 and was not at the time of the application for letters-patent therefor in public use or on sale with the consent or allowance of the said Carpenter, as the inventor or discoverer thereof, contrary to the

provisions of the statutes of the United States in such case made and provided.

That being such inventor, the said Carpenter made application in writing to the Commissioner of Patents of the United States for the granting of letters-patent for said invention, and accompanied the same with a written description of the said invention or discovery, and the manner and process of making and using the same in such full, clear, and exact terms as to enable any person skilled in the art or science to which the said invention or discovery appertains, or with which it is most nearly connected, to make and use the same, and with a specification of the parts and improvements and combination which he claimed as his invention, and with drawings and models and written references explaining the said invention or discovery, and explaining the principle and the mode in which he contemplated the application of the principle, by which it might be distinguished from other inventions; which said description was signed by the said Carpenter, and attested by two witnesses, and filed in the Patent-Office.

That the said Carpenter made oath that he verily believed that he then was the original and first inventor or discoverer of the invention or discovery for which he then solicited a patent, and that he did not know or believe that the same was ever before known or used, and also that he then was a citizen of the United States.

And the said Carpenter at the same time paid into the Treasury of the United States the sum of thirty dollars, and received a receipt therefor, and then and there also duly complied in all other respects
5 with all the necessary condition' and requirements of the statutes of the United States in such case made and provided prior to the granting of the letters-patent hereinafter mentioned.

That, on the 27th day of June, 1865, letters-patent of the United States, bearing date on that day, were issued to the said Carpenter, according to law, whereby there was granted to him and his heirs, executors, administrators, or assigns, for the term of seventeen years from the 27th day of June, 1865, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used, the invention or discovery aforesaid, a description whereof was given in the words of the said Carpenter, in the said schedule annexed to the said letters-patent, and was made part of the same.

That the said letters-patent were issued in the name of the United States of America, and were sealed with the seal of the Patent-Office of the United States, and were signed by the Secretary of the Interior, and were countersigned by the Commissioner of Patents, and were numbered 48366, and were issued and delivered to the said Carpenter.

That thereupon, after the issuing of the said letters-patent as aforesaid, the said Carpenter put the said invention into use, and, by assignment in writing, dated the day of , 186 , assigned one undivided half of his interest in said letters-patent to your orator, said Hitchcock, and by assignment in writing, dated the 12th day of June, 1866, assigned the other undivided half of his interest in said letters-patent to your orators, said Saxe and Robertson; to which said assignments, recorded in the Patent-Office, your orators refer.

And your orators further show to your honors that, heretofore, on or about the 18th day of May, 1869, your orators, the said Hitch-
6 cock, Saxe, and Robertson, finding that the said patent which had been granted to them was inoperative by reason of a defective or insufficient specification, thereupon your orators, so finding, and the said error having arisen by inadvertency, accident, and mistake, and

without any fraudulent or deceptive intention on the part of your orators or the said Carpenter, surrendered their said patent to the Commissioner of Patents, according to the statutes of the United States in such cases made and provided; and having amended their specification of claim in accordance with the decision of the said Commissioner in the premises, and having paid the fees prescribed by, and in all other things complied with, the statutes of the United States in such case made and provided, new letters-patent of the United States for the same invention were, on the said 18th day of May, 1869, issued and delivered to your orators according to law, whereby there was granted to them for the unexpired term of seventeen years, from the 27th day of June, 1865, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used, the said invention or discovery of a "tremolo-attachment" to musical instruments, a description whereof was given in the words of your orators and the said Carpenter in the schedule annexed to the said re-issued letters-patent.

That the said new letters-patent were issued in the name of the United States, and were signed by the Secretary of the Interior, and were countersigned by the Commissioner of Patents, and were sealed with the seal of the Patent-Office of the United States, and were numbered 3444, and were issued and delivered to your orators, the said Alonzo Hitchcock, George G. Saxe, and James H. Robertson.

And your orators have, ever since the date of the said assignment, been, and now are, entitled to all the rights, interests, and privileges thereby secured unto them in and to the said invention or dis-
7 covery, in the said letters-patent particularly set forth, and are, and ever since the date thereof have been, entitled to the exclusive use of the said invention and improvement within the limits aforesaid.

And your orators further show unto your honors that the said invention or discovery so patented aforesaid unto your orators is of very great utility; and that the same has been extensively introduced into public use, and that the public have generally acquiesced in your orators' exclusive right to the same; and your orators would, but for the wrongful acts of the said defendants, and others acting in concert with them, have made large gains, profits, and advantages from the manufacture, use, and sale of the said invention; and your orators would, but for the wrongful acts and doings of the said defendants, and others acting in concert with them, now be enabled to use the said invention, to which they are entitled to the exclusive right as aforesaid, with profit and advantage, but that by the said wrongful acts and doings they are now prevented and hindered from so doing.

And your orators further show unto your honors, upon information and belief, that the said defendants, Charles M. Tremaine and William B. Tremaine, well knowing the premises and the rights and privileges secured unto your orators, and in order to deprive them of the profits, benefits, and advantages which might and otherwise would have accrued to them, at the city of New York and elsewhere, and within the said southern district of New York, and without the license or permission of your orators, or either of them, they, the said defendants, have ever since the 1st day of January, 1869, unlawfully and wrongfully made or caused to be made, sold or caused to be sold, used or caused to be used, tremolo-attachments, each and all containing the said invention, discovery, improvements, and combinations, consisting, as therein and in the schedule set forth, of the application of suitable means to the
8 instrument by which the air may be agitated, to produce a trem-

ulous note as described, and the arrangement of a fan or agitator in the instrument at right angles to the keys and parallel to the line of reeds or pipe-mouths at any convenient distance from them as described, the exclusive right to which is secured to your orators, as hereinbefore set forth, and which said unlawful making, use, and sale by the defendant' as aforesaid is a violation and infringement of your orators' exclusive rights and privileges, and that the said defendants have derived and received, and are still deriving and receiving, from such use great gains and profits, but to what amount your orators are igorant and cannot set forth, but your orators believe the same to be about the full sum of ten thousand dollars, and so charge the fact to be, and pray that the defendants may be required to make a disclosure of all such gains and profits.

And your orators in like manner aver that the defendants, though requested to desist from such unlawful use and to pay to your orators such gains and profits as the defendants have actually made, refuse so to do, by means whereof your orators are and have been greatly injured, and are now prevented from putting the said invention or discovery into successful operation, and are deprived and prevented from receiving the gains and profits to which they are lawfully entitled, from the exclusive rights and privileges so granted and secured to them as aforesaid, and which they would have derived and acquired, and would now derive and acquire, but for the said wrongful acts of the said defendants.

And your orators pray that the said defendants may be compelled by a decree of this honorable court to account for and pay over unto your orators all such gains and profits as have accrued or arisen to, or been earned or received by, the said defendants, and all such gains and profits as your orators would have received but for the said wrongful acts and doings of the said defendants.

And that the said defendants and their attorneys, solicitors, clerks, servants, agents, and workmen may be perpetually enjoined and
9 restrained by the decree of this court from directly or indirectly making or causing to be made, using or causing to be used, or vending to others to be used, in any manner, any tremolo-attachments containing or embodying the said invention granted by the said letters-patent, as issued or re-issued aforesaid unto said Carpenter and your orators, and from infringing upon or violating the said letters-patent by the use or sale of the said invention in any way whatsoever; and that all such infringing attachments may be forthwith destroyed, or delivered up to your orators, and that the said defendants may be decreed to pay the costs of this suit; and that your orators may have such other relief as the equity of the case may require, and as to your honors may seem meet.

To the end, therefore, that the said defendants may, if they can, show why your orators should not have the relief hereby prayed, and may full, true, direct, and perfect answer make, according to the best of their or their clerks', agents', or workmen's knowledge, remembrance, information and belief, to the several matters hereinbefore averred and set forth, as fully and particularly as if the same were here repeated paragraph by paragraph, and were thereto severally and specifically interrogated, may it please your honors to grant to your orators a writ of subpœna ad respondendum, issuing out of and under the seal of this honorable court, directed to the said defendants, commanding them and each of them to be and appear and make answer unto this bill of complaint, and to perform and abide by such order and decree herein as to this court may seem required by the principles of equity and good conscience.

May it also please your honors to grant to your orators a provisional or preliminary injunction, issuing out of and under the seal of this honorable court, enjoining and restraining the defendants, and each of them, and their attorneys, solicitors, clerks, servants, workmen,
10 and agents, to the same purport, tenor, and effect hereinbefore prayed for, in regard to said perpetual injunction.

And your orators will ever pray, &c.,

JAMES H. ROBERTSON.

MATHEWS & BETTS,
Complainants' Solicitors.
FREDERICK H. BETTS,
J. P. FITCH,
Of Counsel.

UNITED STATES OF AMERICA,
Southern District of New York, ss:

On this 4th day of December, 1869, before me, came James H. Robertson, to me personally known, who, being by me duly sworn, did depose and say that he is one of the complainants in the foregoing bill of complaint named, and that he has read the said bill, subscribed by him, and knows the contents thereof, and that the same is true of his own knowledge, except as to matters which are therein stated to be on information and belief, and as to those matters he believes it to be true.

FREDERICK H. BETTS,
Notary Public, New York County.

U. S. circuit court for south. dist. of New York.

ALONZO HITCHCOCK, GEORGE G. SAXE, AND JAMES H. ROBERTSON
vs.
CHARLES M. TREMAINE & WILLIAM B. TREMAINE.

Please enter my appearance for the defendants in the above-entitled cause.

BENJ. E. VALENTINE, *Sol'r.*

Filed Dec. 30, 1869.

11 United States circuit court, southern district of New York.

ALONZO HITHCOCK, GEORGE G. SAXE, AND James H. Robertson
against
CHARLES M. TREMAINE AND WILLIAM B. TREMAINE.
} In equity.

The joint and several answer of the defendants, Charles M. Tremaine and William B. Tremaine, to the bill of complaint of Alonzo Hitchcock, George G. Saxe, and James H. Robertson, complainants.

These defendants, now and at all times hereafter saving and reserving to themselves all manner of benefit and advantage of exception to the many errors and insufficiencies in the complainants' said bill of com-

plaint contained, for answer thereunto, or unto so much or such parts thereof as these defendants are advised is material for them to make answer unto, answer and say:

They admit that letters-patent for an alleged new and useful invention of a tremolo-attachment in musical instruments were heretofore, to wit, on the 27th day of June, 1865, issued, granted, and delivered to the said R. W. Carpenter, as in that behalf alleged in the bill of complaint of the said complainants, but they severally say, each for himself, that he has no knowledge or information sufficient to form a belief as to the truth of the allegations of said bill of complaint that the said Carpenter at any time assigned his interest in said letters-patent, or any part thereof, to the said complainants or to any one or more of them, and cannot therefore admit, but on the contrary deny, that the
12 complainants or that any one of them have or has any interest in or title to the said letters-patent, or to the re-issues of the same, as set forth in the bill of complaint of the complainants; and hereby give notice to the said complainants that they will at the hearing of this cause require the said complainants to prove their interest in and title to said letters-patent, and to the re-issues of the same.

And the defendants, further answering, deny that the said R. W. Carpenter was the true, original, or first inventor or discoverer of the alleged new and useful invention of a tremolo-attachment in musical instruments, as set forth in the bill of complaint; and they say anterior to the time of the alleged discovery and invention of the said Carpenter, as set forth in the bill of complaint, the principle and mode of operation of the alleged invention was discovered, known, applied, and used by the persons, and at the times and places hereinafter named, to wit:

1. By one Lafayette Louis, lately deceased, of the city of Boston and State of Massachusetts, to whom letters-patent of the United States of America for said invention were issued, granted, and delivered, which said letters-patent bear date the 18th day of November, 1856, and are numbered 16,094.

This said invention was known to one Tristam Sawyer, who resides in the town of Keene, in the State of New Hampshire, and to one Edmund Sawyer, who resides in the city of Boston and State of Massachusetts, at 365 Washington street, in said Boston.

2d. By one Samuel Thatcher, now of the town of Washington, in the State of New Jersey, who made, applied, and used the said invention at a place called Brass Castle, near said town of Washington.

The knowledge of this invention and of its use was known to H. K. White, now of the town of Brattleboro', in the State of Vermont;
13 to John Smith, the former partner of said H. K. White, now of the city of Chicago, in the State of Illinois, at 77 Sedgwick street, in said city of Chicago; to William Thatcher, brother of the above-named Samuel Thatcher, Adam Wandling, and William Kennedy, all of the said town of Washington, in the State of New Jersey; to William Carr, of Timber Swamp, near said town of Washington.

And these defendants, further answering so much of the said bill of complaint as charges them with having infringed, or being about to infringe, upon the rights or privileges secured by said letters-patent, bearing date the 27th day of June, 1865, or by any of the re-issues of the same, deny the charges aforesaid, and hereby give notice to the said complainants that they will at the hearing of this cause require the said complainants to prove that they, these defendants, or either of them, have or has made, constructed, used, or sold the said alleged in-

vention, or any part thereof, whether substantial, or material, or otherwise, or any device for the same purpose which infringes on any right lawfully vested in said complainants, or any of them, or have caused or procured the same or any of the same to be done.

And these defendants, further answering, deny that said complainants are entitled to the relief, or any part thereof, in their said bill of complaint mentioned, and these defendants pray the same advantage of this aforesaid answer as if they had pleaded the several matters and things aforesaid, to the bill of complaint in this cause, without this, that any other matter or thing material or necessary for these defendants to make answer unto, and not herein or hereby well or sufficiently answered unto, confessed or avoided, traversed or denied, is true to the knowledge or belief of these defendants, or either of them.

All of which matters and things these defendants are ready to aver, maintain, and prove as the honorable court shall direct: and humbly pray to be hence dismissed with their reasonable costs and charges in that behalf most wrongfully sustained.

14

C. M. TREMAINE.
W. B. TREMAINE.

B. E. VALENTINE,
Defendants' Solicitor.
GEO. T. CURTIS,
Of Counsel.

UNITED STATES OF AMERICA,
Southern District of New York, ss:

On this 26th day of February, 1870, before me, came Charles M. Tremaine, to me personally known, who, being by me duly sworn, did depose and say that he is one of the defendants in the foregoing answer named, and that he has read the said answer by him subscribed, and knows the contents thereof, and that the same is true of his own knowledge, except as to the matters which are therein stated on information and belief, and as to those matters he believes it to be true.

C. M. TREMAINE.

Subscribed and sworn before me this 26th day of February, 1870.

J. WADE WILSON,
Notary Public for City and County of New York,
484 *Broadway, New York.*

15 Circuit court of the United States for the southern district of New York.

ALONZO HITCHCOCK, GEORGE G. SAXE, AND James H. Robertson
vs.
CHARLES M. TREMAINE AND WILLIAM B. Tremaine.

The replication of Alonzo Hitchcock, George G. Saxe, and James H. Robertson, complainants, to the answer of Charles M. Tremaine and William B. Tremaine, respondents.

The repliants, saving and reserving now, and at all times hereafter,

all and all manner of benefit and advantage of exception which may be had or taken to the manifold uncertainties and insufficiencies of the said answer, for replication thereto say that he will aver, maintain, and prove the bill of complaint to be true, certain, and sufficient in law to be answered unto; and that said answer is uncertain, untrue, and insufficient to be replied unto without this: that there is any other matter or thing whatsoever in the said answer contained material or effectual in the law to be replied unto and not herein and hereby well and sufficiently replied unto, confessed and avoided, traversed and denied, is true; all which matters and things the repliants will be ready to aver, maintain, and prove, as this honorable court shall direct, and humbly pray, as in and by the bill is already prayed.

MATHEWS & BETTS,
Complainants' Solicitors, 31 & 33 *Pine Street*

16 United States circuit court, southern district of New York.

ALONZO HITCHCOCK, GEORGE G. SAXE, AND James H. Robertson,
vs.
CHARLES M. TREMAINE AND WILLIAM B. TREMAINE.

SIR: Please to take notice, that proofs for final hearing, under Rule 67 of the Supreme Court of the United States, will be taken on the part of the complainants in the above-entitled action at the warerooms of Messrs. Saxe, Robertson & Co., at No. 417 Broome street, in the city of New York, before a proper officer, on the 10th day of March, 1870, at 10 a. m.

Dated New York, March 7th, 1870.

Yours, &c.,

MATHEWS & BETTS,
Compl'ts' Sol'rs.

To B. E. VALENTINE, Esq.,
Re'p'ts' Sol'r.

Due service of within notice is hereby admitted.
Dated March 8th, 1870.

B. E. VALENTINE,
Sol'r for Def'ts.

17 Circuit court of the United States for the southern district of New York. In equity.

ALONZO HITCHCOCK, GEORGE G. SAXE, AND James H. Robertson
ag'st
CHARLES M. TREMAINE AND WILLIAM B. TREMAINE.

NEW YORK, *March 9th*, 1870—10 *a. m.*

Present, Mr. Betts, counsel for complainants.
Examination adjourned to March 11, 1870, at 11 a. m.

NEW YORK, *March* 11, 1870—11 *a. m.*

Present, Mr. Betts, counsel for complainants, and Mr. Valentine, counsel for defendants.

Plaintiffs' counsel offers in evidence re-issued letters-patent to Alonzo Hitchcock, George G. Saxe, and James H. Robertson, dated October 5, 1869, No. 3665. It is marked Exhibit A.

HIRAM D. OPDYKE, a witness of lawful age, produced on the part of the complainants, having been by me first duly cautioned and sworn to testify the truth, the whole truth, and nothing but the truth in the matter of controversy herein, and being examined by Mr. Betts, of counsel for complainants, deposes and says as follows:

1. Q. What is your name, age, residence, and occupation?

A. My name is Hiram D. Opdyke. I am 35 years of age. I reside at Paterson, New Jersey. I am a minister of the gospel.

18 2. Q. Do you know the defendants, Charles M. and William B. Tremaine?

A. Yes, sir.

3. Q. What is their occupation?

A. Dealers in musical instruments.

4. Q. State whether or not you ever purchased of the said defendants any organs. If so, when, and how many?

A. I did purchase two on November 30th, 1869.

5. Q. Are the two organs now shown to you the organs so purchased by you?

A. They are.

6. Q. When so purchased by you did they have the tremolo-attachment which is now upon them?

A. They did.

(Organs offered in evidence, and marked Exhibits B and C.)

7. Q. Are you conversant with the use and method of production of sounds in musical instruments?

A. I understand the principles of music and the methods of producing sound.

8. Q. Have you heard the two organs, Exhibits B and C, operated on and played?

A. Yes.

9. Q. Do you consider that the tremolo in said organs is produced in a substantially different or substantially similar manner to the tremolo of the complainant?

A. Substantially the same.

10. Q. Are you conversant with the method of the production of the tremolo in the organs of the complainants?

A. Yes, sir.

19 And being cross-examined:

11. X Q. How is your acquaintance with the operation of the tremolo derived; is it merely as a dealer in organs or as a professional musician?

A. As both.

12. X Q. How long have you been a dealer in organs?

A. Five years.

13. X Q. How many organs, with tremolo-attachments, have passed through your hands in that time?

A. Thirty.

14 X Q. How many different kinds of tremolo were upon those organs?

15. X-Q. Will you name them?

A. The fan and the valve; I refer to the complainants' fan, and to Carhart and *Heedham's*, and the New Haven Melodeon Co.'s valve.

16. X Q. You have stated that you bought two instruments of the respondents; was one of those instruments that you purchased sent to A. K. Sanford, of 37 Greene street?

A. Yes, sir.

17. X Q. Was the other sent to Lewis Doty, No. 1 Third street?

A. Yes, sir.

18. X Q. Did you purchase those organs at the request of the complainants here?

A. Yes, sir.

19. X Q. They furnished the means to pay for them?

A. I paid for them.

20. X Q. They re-imbursed you?

20 A. Yes, sir.

21. X Q. Was it at their solicitation that you applied to the respondents to see the operation of the instruments you purchased, and subsequently purchased the same?

A. I had been in there before to look at their instruments; I did not go there first on their solicitation.

22. X Q. When you went there in regard to this tremolo did you not go at their solicitation?

A. No, sir; I saw a notice of it in the paper before I came here.

23. R. D. Q. At the time that you bought the two organs, Exhibit B and C, did the defendants have in their possession a considerable or any number of other organs like Exhibit B and C, and with the same tremolo-attachments which they are offering for sale?

A. They had a considerable number of the same kind.

24. R. D. Q. Was one of the organs which you purchased known as the Burdette organ? If so, which one?

A. Exhibit was.

25. R. D. Q. Do you know who was the maker of the other organ?

A. No, sir.

26. R. X. How many of the instruments which you designate as the same kind in your answer to the 23d question had the tremolo-attachment upon them?

A. I think I saw some two or three more with the tremolo-attachment; I am satisfied that they were on all the instruments there were there.

27. R. X. Will you say that you saw the tremolo-attachments on any besides those which you bought?

A. Yes, sir.

H. D. OPDYKE.

Subscribed and sworn to before me this 11th March, 1870.

JOSEPH GUTMAN, JR.,
Examiner, &c.

21 Circuit court of the United States for the district of New York.

ALONZO HITCHCOCK ET AL.
vs.
CHARLES M. TREMAINE ET AL.

GENT: Please take notice that we shall proceed to take proofs for

final hearing on the part of the complainants, under the 67th rule of the Supreme Court, before a commissioner of the United States, at the office of Saxe, Robertson & Co., at 417 Broome street, in the city of New York, on the 6th day of October, 1870, at 11 a. m.

Dated New York, Oct. 5th, 1870.

MATHEWS & BETTS,
Compl'ts' Solicitors.

To B. E. VALENTINE,
Resp'ts' Solicitor.

CITY AND COUNTY OF NEW YORK, *ss:*

HENRY V. PELTON, being duly sworn, says that, on the fifth day of October, 1870, he served the above notice on B. E. Valentine, esq., the respondents' solicitor herein, at the city of Brooklyn, by personally delivering to and leaving with him a copy of the same.

HENRY V. PELTON.

Sworn to before me this 17th day of October, 1870.

HENRY DE PEYSTER,
Notary Public.

NEW YORK, *Oct.* 6, 1870—3 *p. m.*

22 Present, M. Fred'k H. Betts, of counsel for complainant', and B. E. Valentine, of counsel for defendant'.

Testimony on behalf of the complainant', taken before me, Joseph Gutman, jr., United States examiner, under and pursuant to the 67th rule in equity.

LEVI K. FULLER, a witness, of lawful age, produced on behalf of the complainant, having been by me first duly cautioned and sworn to testify the truth, the whole truth, and nothing but the truth in the matter of controversy herein, and being examined by counsel for complainant, deposes and says as follows:

1. Q. What is your name, age, residence, and occupation?

A. Levi K. Fuller. I am 29 years of age. I reside at Brattleborough, Vermont. I am a manufacturer of organs.

2. Q. Are you familiar with the laws of sound and the method of production of musical notes in organs? If so, what facilities have you had to become acquainted therewith?

A. I am; I have been connected with the manufacture of organs for more than 10 years; I should say organs and melodeons.

3. Q. Are you acquainted the various methods of producing a tremolo note in organs or melodeons; and, if so, with what species of tremolo?

A. I am acquainted with all the tremolos used in organs and melodeons since I have been in the business; with the valve-tremolo and the different tremolos patented within the last 15 or 16 years.

4. Q. Have you read, and do you understand, the letters-patent granted to Lafayette Louis, November 18, 1856, No. 16094, for an improvement in melodeons?

A. I have, and I do.

23 5. Q. Do you know the patentee?

A. I do.

6. Q. What do you understand to be the mechanical means described by said Louis in said patent?

A. I understand them to be the production of a tremolo by means of a vibrating valve—vibrated by means which he describes.

7. Q. Is the method of producing a tremolo described in said patent a practical one?

A. I do not consider it a practical one.

8. Q. What opportunities have you had of forming a judgment as to whether the method of producing a tremolo described in said patent is a practical one or not?

A. I have frequently, in the last five years, performed experiments with this tremolo, and have never been able to make it work satisfactorily.

9. Q. Why will not this tremolo work satisfactorily?

A. I have never been able to make it work so that any one would be willing to purchase it on our instruments.

10. Q. What mechanical or other difficulties prevent it from being practical?

A. As a practical matter, I could not make the valve vibrate regularly by the means described in said patent, and as a manufacturer of organs I have not been able to find any mechanic who could make the thing work satisfactorily. Mr. Louis told me—(Objected to by defendants' counsel)—that he had not been able.

11. Q. Were tremolos on the principle described in said Louis patent ever manufactured and sold in the market?

A. Not that I know of.

24 12. Q. Mr. Louis describes a valve vibrated by a cord passing through the swell, and attached to a crank rotated by wind-power. Why cannot the valve be practically vibrated by those means?

A. There is too much friction to the mechanical contrivance to be overcome to do it, and after a while the thing will get out of order.

13. Q. Do you know, or have you ever been able to devise any practical means for vibrating such a valve as is intended to produce a tremolo under the Louis patent?

A. I never have.

14. Q. How much time have you devoted to experiments in that direction?

A. I cannot tell exactly, but a good many weeks, I should judge.

15. Q. Have you ever been assisted by the advice of Mr. Louis himself?

A. No, sir.

16. Q. Has Mr. Louis been cognizant of your experiments, or have you imparted to him their result?

A. No, sir. As a manufacturer of musical instruments I find it necessary to devote a good deal of time to experiments, and I did not mean to say that I had spent a good many weeks experimenting on the Louis patent.

17. What did you mean to say?

A. On tremolos.

18. Q. How much time do you suppose you spent in experimenting or attempting to operate the Louis tremolo?

A. I cannot tell. I should suppose I had spent two weeks in trying to make that valve vibrate.

19. Q. Are you a licensee of Mr. Louis under that patent?

25 A. I am, or rather the firm of which I am a member is.

20. Q. Is [it] possible practically to convert a rotary motion in a reciprocating motion with sufficient regularity in a musical instrument as to produce the necessary regularity of the parts to produce a tremolo?

A. I never have seen any one or been able to myself to do it successfully.

21. Q. Are you familiar with the letters-patent to Alonzo Hitchcock and others, dated October 5th, 1869, re-issue No. 3665, for tremolo-attachment; and, if so, what opportunities have you had for making yourself familiar therewith?

A. I am and have manufactured under this patent for 5 years or more.

22. Q. Have you examined the organ with the tremolo-attachment marked Exhibit B in this case, and do you understand the method of production of the tremolo therein?

Q. I have and do.

23. Q. In that instrument and with that tremolo, is the tremolo-sound produced in a substantially different or similar manner to that described in re-issue 3665?

A. It is produced in a similar manner.

24. Q. Describe the method of the production of the tremolo in Exhibit B?

A. The tremolo is produced by a revolving-cylinder placed in about *in about* the same position as in the patent of 1869, No. 3665. The cylinder has openings, which, in its revolution, shake or deviate the rays of sound in a similar manner as do the fans described in re-issued patent 3665.

25. Q. Have you heard the tremolo produced by this revolving-cylinder with openings in it?

A. I have.

26 26. Q. In your opinion is the tremolo produced in any degree by cutting off a current of air flowing through the two openings in such cylinder when such openings are presented to the openings in the frame which holds said cylinder?

A. I do not think that it cuts off the current of air flowing to the reeds at all.

27. Q. Have you heard the instrument operated when a partition is placed in the center of the cylinder so as to prevent any passage of air through the openings of the cylinder?

A. I have.

28. Q. Does the effect produced differ substantially from that produced when there is no partition, but the cylinder is entirely hollow?

A. The effect is the same in both cases.

29. Q. Have you heard the instrument operated when the rotating-cylinder is placed at the back part of the instrument so as to leave a large open space between it and the reeds; and, if so, does the effect then produced differ substantially from that produced when the cylinder and frame are placed as close to the reeds as the instrument will allow?

A. I have. The effect is substantially the same in both cases.

30. Q. Would it be the same in case the cylinder when placed close to the reeds operated as a cut-off?

A. I do not know how you are going to place it there close enough. I do not know anything about that.

31. Q. Have you made any experiments with a view of testing the princip*al* of the operation of this rotating-cylinder?

A. I have.

27 32. Q. Please describe briefly such experiments and the results which you have arrived at thereby.

A. The cylinder when placed near the reeds in its evolutions imparts a tremolo to the sound. If you should put an intercepting medium between the cylinder, you would hear the sound just as plainly, and if you were on one side of the instrument and the cylinder was revolving you would hear the tremolo. If you were on the other side of the intercept-

ing medium you would hear it very slightly, if at all. I have placed the revolving-cylinder at some distance from the reeds where the tone was produced, and by placing an intercepting medium between the cylinder and the reeds the effect was the same as in the first case. I have not discovered in my experiments that there was any cut-off to the current of air flowing to the reeds on account of the use of this cylinder.

33. Q. Look at the models now shown you, and state whether or not they are those used by you in these experiments.

A. They are the same as used by me.

34. Q. Is th*is* any substantial difference in the tremolo produced by the fan, Exhibit G, the cylinder with two openings in it, marked Exhibit H, and that with one opening in it, marked Exhibit I?

A. There is no substantial difference.

(Exhibit G, H, and I put in evidence by complainants.)

35. Q. Look at the instrument, marked Exhibit C, and state whether it is substantially different or similar to that described in re-issue 3665?

A. It is substantially the same.

LEVI A. FULLER.

Being cross-examined by Mr. Valentine, of counsel for defendant:

28 36. X Q. What is the full name of the firm which you are a member?

A. J. Estey & Co.

37. X Q. What are the relations of that firm to the firm of which the complainants, Saxe & Robertson, are the members?

A. Saxe & Robertson purchased our instruments.

38. X Q. Do you put the tremolo-attachment, under the patent on which the complainants base their claim in this action, on the organs which you manufacture?

A. We do.

39. X Q. By what authority—an assignment of the patent or by instructions of the complainants?

A. By virtue of a license from Saxe & Robertson.

40. X Q. Do Saxe & Robertson take from you the greater part of the instruments which you manufacture?

A. They do not.

41. X Q. To what extent does your familiarity with the laws of sound go? Have you merely become acquainted with them in their practical applications to organs or have you made the science of acoustics a separate study aside from the practical application to your business?

A. I have become familiar with the laws of sound as a practical matter connected with the manufacture of musical instruments, and have studied to some extent the science of acoustics.

42. X Q. Have you ever experimented to ascertain the velocity or the intensity of sounds?

A. I have.

43. X Q. What is sound?

A. Pulsations of the air.

44. X Q. What is a tremolo?

29 A. Tremolo, as applied to music, is a reflection or variation in the sound.

45. X Q. Does not that same definition apply to a trill?

A. Trill may be a tremolo. There are different kinds of mechanical tremolos.

46. X Q. When did you see Lafayette Louis last?

A. I cannot tell now whether it was 2 or 3 years ago.

(Defendants' counsel offers in evidence an organ which is marked Exhibit 5.)

47. X Q. Will you listen to the sound produced by playing upon Exhibit 5, and tell me whether a tremolo is produced?

A. A tremolo is produced.

48. X Q. Will you examine the organ, Exhibit 5, and state whether or not it is an accurate model of the drawing attached to Louis' patent, and the specifications described in said patent?

A. It is.

49. X Q. You have stated that you could not make Louis' tremolos work satisfactorily; that you could not make the valve vibrate regularly by the means described in Louis' patent. Does not this valve vibrate regularly?

A. It does not.

50. X Q. In what does the irregularity consist?

A. The irregularity consists in the sudden stopping and starting of the same, and a peculiar yank or jerk motion objectionable in such pieces of mechanism.

51. X Q. Are not these hidden stops and starts, or yanks, regular in their operation; that is, are there not an equal number of yanks in each equal portion of time, and does not the valve move through the same portion of space each time?

30 A. There are not always an equal number in an equal space of time. It may move through the same portion of space.

52. X Q. How do you know there are not an equal number in an equal space of time?

A. The jerking of the string, which is loose, by the crank, produces a back-lash, which mechanics find very objectionable in machinery, and I find this back-lash in this machine, which makes it run uneven and noisy.

53. X Q. Does the fly-wheel, which is the motive-power, make an equal number of revolutions in every minute with the same intensity of bellows-power applied?

A. It will not always make the same number of revolutions.

54. X Q. Does not one complete vibration of the valve accompany every complete revolution of the fly-wheel in this exhibit?

A. Not always; the looseness of the string and the flapping of the valve will give the wheel an unsteady and uneven motion.

55. X Q. Is the irregularity which you speak of in the vibrations of the valve, such an irregularity as would be perceptible in the sound to an ordinary listener?

A. It would, if the wheel was moving rapidly enough. Musicians would very readily discover it.

56. X Q. Are your answers, as above given about Exhibit 5, based upon your experiments with that exhibit, or upon inference from the previous experiments of others?

A. My answers are based upon experiments performed upon instruments other than the exhibit.

57. X Q. Do you see any other objection to the tremolo in Exhibit 5, besides the alleged irregularity, which you say musicians might perceive?

31 A. There is an unpleasant noise connected with the working of this machine, and the sound or tremolo which it produces is very harsh and unpleasant.

58. X Q. Have you ever made a tremolo-attachment after the plan de-

scribed in Louis' patent, No. 16094, which operated as perfectly as the present Exhibit 5?

A. I have.

59. X Q. Did the valve and other mechanical action operate as perfectly as Exhibit 5?

A. It did.

60. X Q. What did you mean, then, in your answer to the 12th question, by saying that there was too much friction in the mechanical contrivance to be overcome in order to practically vibrate the valve in the means described by Louis?

A. I found, by experience, that the thing soon became inoperative, either by the string becoming worn or some other part of the mechanism giving out.

61. X Q. Do you still think that there is too much friction to practically vibrate the valve in the means described by Louis?

A. As a manufacturer I should be unwilling to adopt so uncertain a piece of mechanism. I think that the friction would very soon wear out the machine.

62. X Q. Do you mean that the machine would wear out because so much friction is attended upon the working of the valve?

A. Yes, sir.

63. X Q. State where the friction is apparent.

A. In the crank, by the string running over a wire or other obstruction, and by the uncertainty of keeping the valve in a delicate position enough to be vibrated by the wheel and string.

64. X Q. What parts, then, would wear out?

32 A. The string and everything about the valve; its bearings or connections. If the valve should warp or twist it would become inoperative.

65. X Q. What are the bearings of the valve?

A. What it vibrates on and what it is attached to.

66. X Q. How many distinct tremolo-attachments did you ever make under Louis' patent with the long valve?

A. I should judge that I made a dozen.

67. X Q. You have stated the method in which a tremolo is produced in Exhibit B, namely, by a shake or deviation in the rays of sound. Is not the tremolo in Exhibit 5 produced in the same way?

A. It is not.

68. X Q. State the difference.

A. One is produced by a revolving motion and the other by a reciprocating motion.

69. X Q. Is not the tremolo produced in each case by a shake or deviation of the rays of sound?

A. It is; but the shake or deviation in the first case is pleasant and unbroken, while in the latter it is unpleasant and harsh.

LEVI K. FULLER.

70. R. D. Q. Would or could any respectable organ-builder sell to an intelligent customer an instrument with a tremolo like Exhibit 5?

(Objected to.)

A. I have never known of its being done, and do not think it could be.

71. R. D. Q. You state in reply to the 69th x-interrogatory that the tremolo was produced, in the two exhibits referred to, by a shake or deviation of the rays of sound. State whether the tremolo produced

33 by Exhibit 5 presents any peculiarity which does not appear in the other exhibit which you have not stated.

A. The tremolo in Exhibit 5 is nothing more orless than a swell, being opened and closed, and has all the peculiar muffled sound of a swell, while the other tremolo, Exhibit B, is open and clear in the pulsations wherever it is placed unobstructed in the instrument.

LEVI K. FULLER.

72. R. X Q. Cannot a good tremolo be produced by a rapid and regular movement of the swell in an ordinary organ?

A. I have frequently tried to do it; but I get the muffled tone and the harshness which I have described. You can produce a tremolo by a swell, subject to these objections.

LEVI K. FULLER.

Sworn to before me this 6th October, 1870.

JOSEPH GUTMAN, JR.,
Examiner.

34 United States circuit court, southern district of New York. In equity.

ALONZO HITCHCOCK, GEORGE G. SAGE, AND James Robertson
ag'st
CHARLES M. TREMAINE AND WILLIAM B. TREmaine.

Proofs taken on the part of the defendants herein, under and in pursuance of the 67th rule in equity, before me, Joseph Gutman, jr., examiner.

MAY 24TH, 1870—11½ *a. m.*

Present, Mr. Frederick H. Betts and Mr. Fitch, for complainants; Mr. B. E. Valentine and Mr. Geo. T. Curtis, for defendants.

WILLIAM KARR, a witness, of lawful age, produced on the part of the defendants, having been by me first duly cautioned and sworn to testify the truth, the whole truth, and nothing but the truth in the matter of controversy herein, and being examined by Mr. B. E. Valentine, of counsel for defendants, deposes and says as follows:

Q. 1. What is your name, age, residence, and occupation?

A. William Karr; age, 41; residence, Karrsville, New Jersey; occupation, carriage-maker.

35 Q. 2. How long have you lived at Karrsville?

A. All my life.

Q. 3. Have you ever invented any new machines?

A. Yes, sir.

Q. 4. Name some of them.

A. I invented a water-wheel, a tremulo for reed-instruments, a fastening or standard fastener for bolsters of heavy wagons, and a cherry-pitter.

Q. 5. About what time did you invent the tremulo for reed-instruments?

A. It was during the summer or fall of 1855 or 1856.

Q. 6. What do you mean by 1855 or 1856?

A. I am uncertain whether it was 1855 or 1856. It was one of those two years.

Q. 7. Will you describe the tremulo which you invented?

A. It was a fan, constructed of iron and tin, having four wings of tin, and the shaft, iron.

Q. 8. How were these wings arranged on the shaft?

A. They were fastened with solder, and set, with reference to each other, at right angles.

Q. 9. Were they at equal distances from each other around the shaft?

A. They were.

Q. 10. How many of these fans did you make?

A. I made one such as I have described, and another that I have not described.

Q. 11. Have you the one with you which you have described?

Witness shows a fan and says, "This is a part of it."

(Offered in evidence by defendants' counsel, and marked Defendants' Exhibit No. 1.)

Q. 12. Will you explain how it differs now from its condition when used for producing a tremulo?

A. There were four wings instead of one, which were simply plain tin, having no projections on the end. It was also longer, considerably.

36 Q. 13. How did it come in its present condition?

A. I altered it for the purpose of trying some experiments with the cherry-pitter.

Q. 14. Was that fan ever used upon a reed-instrument or melodeon, to produce a tremulo?

A. It was.

Q. 15. When was it used, and where?

A. During the summer or fall of 1855 or 1856, (I am uncertain which,) at the melodeon manufactory of Smith & White, Brass Castle, New Jersey.

Q. 16. How did this fan operate?

A. It had two wheels geared together. They were attached to the fan by means of a band. We then wound a cord on the shaft of one wheel, and drew off the cord by hand, which gave motion to the fan.

The witness exhibits the wheel around which the cord was wound.

(Wheel offered in evidence, and marked Defendants' Exhibit No. 2.)

Q. 17. How was the other affixed to the shaft?

A. The other wheel was similar to this. They were used for the purpose of increasing the motion. The other wheel was attached by means of a band; the other wheel was connected by a cord which wound on the shaft of the fan.

Q. 18. Did you show this invention to any one at the time it was made; and if so, state to whom?

A. Having made the discovery, I called the attention of a man named Dearborn, first. I next consulted with Mr. Smith, (Mr. John A. Smith, of Brass Castle, one of the firm mentioned.)

Q. 19. What was the result of your consultation with Mr. Smith?

A. The making of the fan, Exhibit No. 1, and taking it to his estab-

tablishment for trial.

37 Q. 20. What was done there with the fan?

A. We placed it on an instrument and tested it; put it in motion by the means I have described.

Q. 21. What was the result of the experiment?

A. It was appoved of by Mr. Smith. It produced a trembling or vibration in the tone of the instrument, and accomplished what we expected it to.

Q. 22. State what it was you expected it to do?

A. We expected to produce a vibration or trembling in the tone; we had no name for it at that time.

Q. 23. Have you ever seen a fan-tremulo since the time when your experiments were made at Smith & White's, other than the fans which you yourself made, or were made by your direction?

A. I have not.

Q. 24. Please look at Plaintiffs' Exhibit C, and listen to the sound produced by the tremulo thereto attached, and state whether such sound resembles or differs from that produced by the fan which you applied and operated in connection with a reed-organ at Smith & White's in 1855 or 1856?

A. The same thing exactly, so far as tone is concerned.

Q. 25. Will you look at the fan in Exhibit C, and state whether or not there is any difference in the shape and mode of producing its effect, between this and the fan referred to in your last answer, which was made by you?

A. There is not.

Q. 26. Where was your fan placed with reference to the line of reeds?

A. Immediately behind them.

Q. 27. Tell us whether it was parallel with the line of reeds, or at an angle with them.

A. It was parallel.

Q. 28. How was its position in relation to the keys?

A. It seems to me it was higher than this. I think the instrument did not admit of its being so low. I think it was not on the same level with the keys.

38 Q. 29. State whether or not, your fan was placed at right angles with the keys of the instrument, as is the case in this exhibit.

A. It was.

Q. 30. What first led to your discovery of this means of producing a tremulo?

A. I was turning a square stick in a wood-turning lathe, and whistling at the same time, when I discovered a tremulo in the tune.

Q. 31. How did these holes come in the tin wing, Exhibit No. 1?

A. After it had been laid aside for the purpose of a fan, I put them in, in order to try some experiments with the cherry-pitter.

Q. 32. Tell us whether or not the fan, Exhibit No. 1, was, at the time you first made and used it, similar to the fan on Exhibit C in shape?

A. Yes, sir; it was.

Q. 33. Did it differ from it in any other way than in material used?

A. It was not as large in diameter. There was no material difference.

Q. 34. How far was Smith & White's factory, at that time, from the place where you lived?

A. Some six miles.

Q. 35. Did you leave this fan, Exhibit No. 1, at that place (viz, the factory) any length of time?

A. I think I brought it away immediately.

Q. 36. What was the other fan made of, that you have already spoken of as having built?

A. Made of wood.

Q. 37. Was it similar to this?

A. It involved the same principle, but differently constructed. The

wings were placed between two rims of wood. There were eight or ten wings in one rim, and about half the number in the other. Suppose a round stick of wood, four inches in diameter, had a cavity
39 turned in the wood on either end, or both ends, to the depth of one inch, leaving a rim on the ends, also a rim in the middle; in these rims the wings were inserted.

Q. 38. Did you leave this fan-wheel at Smith & White's factory for any length of time?

A. I did not.

Q. 39. Was this fan, Exhibit No. 1, applied and used upon a reed-instrument by you after you brought it back from Smith & White's?

A. I think not.

Q. 40. Was the other fan so used?

A. Yes, sir.

Q. 41. What was the effect of the other fan as used upon that instrument?

A. Similar to this one.

Cross-examination by Mr. Betts:

X Q. 42. What was your business at the time you first made the discovery, as you say, of a tremulo?

A. Working at carriage-making.

X Q. 43. How long was it after you first noticed the effect of turning a square block of wood on a lathe, upon your whistling, that you went to consult with Mr. Smith?

A. My best recollection is that it was not long. It may have been three or four weeks.

X Q. 44. Before you went to consult with Mr. Smith, did you make any contrivance for the purpose of exhibiting the effect which you thought you had discovered?

A. Not that I remember.

X Q. 45. When you went to consult with Mr. Smith, did you have the fan, marked Exhibit No. 1?

A. I think I did not.

X Q. 46. Did you make that fan while you were at Brass Castle consulting with Mr. Smith?

A. I did not.

X Q. 47. Where did you made it?

A. I had it made at Washington, N. J., partly. The shaft I made myself.

40 X Q. 48. Who made the parts of the fan that were made at Washington?

A. George P. Watts.

X Q. 49. Did he fasten the wing on to the shaft?

A. He did; that is, the wings.

X Q. 50. Who made the two wheels you have described, and used in connection with the fan?

A. I myself made them.

X Q. 51. Did you make the shaft and the wheels after returning from consulting with Mr. Smith?

A. Yes, sir.

X Q. 52. How long after?

A. I can't say positively. I think it was soon.

X Q. 53. How long after the shaft and wheels were made was it that the wings of the fan were applied to the shaft?

A. It may have been a day or two. Very soon.

X Q. 54. After you got the wheels made, and the wings applied to the shaft, what did you do with the instrument?

A. I took it to the manufactory of Smith & White.

X Q. 55. About how much longer was the shaft and fan, as originally constructed, than Exhibit No. 1?

A. I can't say exactly. It may have been twice as long. I think it was very nearly the length of the reeds of a four-and-a-half octave instrument.

X Q. 56. Was there any wheel attached to the shaft of the fan?

A. I think there was not. On further consideration, I believe there was.

X Q. 57. How large was the wheel on the shaft of the fan, as compared with Exhibit No. 2?

A. Not over, I should say, one-sixth the size. I am not certain about that, however. I wish to correct one statement in regard to those wheels that I made some time ago. I stated that the fan was connected to the wheel that drove it, by means of a band which was wound
41 around the shaft of the fan a number of times, which, I believe, is not correct. This wheel, Exhibit No. 2, or one similar to it, drove the fan by means of a band passing from this, or one similar to it, to the wheel or pulley on the shaft of the fan.

X Q. 58. What was the motive-power applied to the wheel, Exhibit No. 2, or one similar to it?

A. The power itself was a man-power. I applied it by winding a cord on the shaft of the wheel, Exhibit No. 2, or one similar to it.

X Q. 59. This cord, then, required to be wound up by a separate operation, and then drawn off by a person standing beside the instrument, in order to produce a rotary motion to the fan?

A. Yes, sir.

X Q. 60. The rotary motion of the fan was not, then, as applied by you, to be communicated by the person playing the instrument, but by another person?

A. Yes, sir; another person. That is the way we operated the experiment. I operated it at one time by a weight from the same point.

X Q. 61. When you say that you operated it at another time by a weight from the same point, do you mean that you wound the cord on the shaft of the wheel, Exhibit No. 2, and then attached a weight to the end of the cord and let it run down?

A. Yes, sir.

X Q. 62. Did you ever connect the fan, Exhibit No. 1, with any instrument by any motive-power which was within the control of the operator of the instrument, so that he could use the tremulo from time to time, as he desired, without ceasing his playing to wind the cord up on the shaft?

A. No, sir.

X Q. 63. How was the fan and the wheel, Exhibit No. 2, fastened into the instrument upon which it was tried at Smith & White's factory?

A. The wheels were geared in a box. One end of the fan was
42 also attached to the same box, and the other end of the fan, I think, was in a block of wood, and both, to the best of my recollection, were attached to the instrument by means of wood screws.

X Q. 61. How long were you at Mr. Smith's factory trying this fan in one of his musical instruments?

A. To the best of my recollection, three or four hours.

X Q. 62. When you went away, did you take with you the fans that you used, and the box in which they were geared?

A. I did.

X Q. 63. Did you regard the trial of the fan at Smith's factory as anything more than an experiment as to the effect which would be produced upon the musical notes by such a mechanism?

A. Nothing more than the effect produced by means of a fan on the tones of a reed-instrument.

X Q. 64. Was your fan applied to the instrument in Smith's factory in such a way that you regarded it then as being perfected, and adapted for introduction into the market?

A. No, sir.

X Q. 65. Was it anything more than an experiment?

A. It was an experiment made with a view only of ascertaining the effect on the reeds.

X Q. 66. What kind of an instrument was it on which you tried this experiment with your fan?

A. It was a melodeon.

X Q. 67. Was the melodeon substantially like that one now exhibited to you? (Compl'ts' Exhibit D.)

A. I rather think that it was an old style of melodeon, with the bellows like that now exhibited. I rather think it was. I am not positive.

X Q. 68. Was the fan attached to the top of the bellows, so as to rise and fall with the action of the bellows?

A. The fan did not rise and fall?

X Q. 69. To what, then, was it attached?

43 A. Taking a second view of the bellows, I conclude the top was permanent. It must have had a deck, and a fan attached to the deck.

X Q. 70. When the fan was attached to the instrument, as you tried it, could you shut down the lid of the instrument?

A. I can't say as to that. I don't remember.

X Q. 71. Did you ever apply this fan to any other instrument besides the one at Mr. Smith's factory?

A I did not.

X Q. 72. What did you do with the fan and wheels and box after you took them home?

A. Laid them aside.

X Q. 73. How long afterwards was it that you altered the fan for the purpose of trying experiments with the cherry-pitter?

A. Say eight or ten years.

X Q. 74. Where was the fan and box and wheels in the mean time?

A. In my shop.

X Q. 75. Had they been used for any purpose during that period, to your knowledge?

A. No, sir.

X Q. 76. In what part of the shop did you keep them, and among what kind of articles?

A. I kept them on the second floor, most of the time, among articles but little used.

X Q. 77. Did the fan, as originally constructed, have the square pieces of tin on it now soldered to the ends of the piece of wood screwed on to one of the same?

A. No, sir; it did not. Those were a part of the cherry-pitter experimenter.

X Q. 78. How often during the ten years which elapsed between your experiment with the fan and its conversion into a portion of the cherry-pitter did you take any notice of it, or use it for any purpose?

A. I saw it frequently, but did not use it for any purpose.

44 X. Q. 79. Have you taken out patents for other inventions before and since your experiment with the fan ?

A. I have not.

X Q. 80. Since the conversion of that fan into a cherry-pitter, where has it been, and what have you done with it ?

A. It has been laying in the upper part of my shop, and I have done nothing with it.

X Q. 81. When were you first applied to, to give your evidence in regard to this fan-experiment ?

A. I was first consulted in regard to it during the past winter by Messrs. Saxe & Robertson—this house where we are at present.

X Q. 82. Did you, at that time, know that you had any portion of the original fan ?

A. No, sir ; I don't know that I did. I was not asked to produce it, and did not make an effort to look for it.

X Q. 83. How long after you made the fan, Exhibit No. 1, did you make the other fan described ?

A. As near as I can remember, within a short time.

X Q. 84. Why did you make the second fan of different construction from the first ?

A. I made it of a different length for the purpose of using it upon a home-made instrument. I don't know why I put more buckets in it (or fans) unless, possibly, it was to get clear of running it so fast.

X Q. 85. What motive-power did you use with the second fan ?

A. I used two or three. I would set it in motion by blowing it. I also set it in motion by wind from the bellows; and I think I had also a weight attached to it.

X Q. 86. This second fan that you made, did you do anything more with it than try experiments on a home-made instrument at your own home ?

A. No, sir ; I did not.

X Q. 87. During how long a time did you make those experiments ?

45 A. I am uncertain about the exact length of the time. I was quite busily engaged with it for several months at intervals.

X Q. 88. After trying the two fans as you have described, did you abandon them ?

A. Yes, sir ; I suppose I did in one sense of the word.

X Q. 89. What do you mean by " in one sense of the word ?"

A. What I mean is, that I expected to carry out the application of the fans to reed-instruments, but the particular purpose for which those fans were made was accomplished, and they were consequently laid aside.

X Q. 90. Did you ever carry out the application of a fan for producing a tremulo in reed-instruments ?

A. I did not.

X Q. 91. Did you regard either of the fans, as then applied by you, as a perfected invention ?

A. Not as applied.

X Q. 92. Where is the second fan that you made ?

A. I do not know.

X Q. 93. How long is it since you have seen it ?

A. I think I have seen it within two years.

X Q. 94. Where is the instrument with which you say you made experiments with the second fan ?

A. A part of it is at C. M. Tremaine & Bro's.

X Q. 95. What part of it ?

A. The case and bellows.

X Q. 96. Where is the rest ?

A. I do not know.

X Q. 97. At whose request did you send the instrument to C. M. Tremaine & Bro's ?

A. Mr. Valentine's.

(Plaintiff's counsel calls for the production of the instrument.)

X Q. 98. Can you make a drawing of the second fan made by you ?

46 A. I can make something that will give an idea of it.

X Q. 99. Please make such drawing.

(Drawing made by witness and produced, representing the second fan made by him, and marked Complainants' Exhibit F.)

Mr. B. E. Valentine produces, in answer to call of complainants' solicitor for the melodeon upon which experiments were tried by the witness with the second fan, an instrument which is marked Complainants' Exhibit E.)

X Q. 100. State the dimensions of this second fan represented in the drawing marked Exhibit F.

A. I should have to speak of the dimensions from my recollection. I have not seen it in two years, I think. Four inches in diameter; five or six inches long; the shaft was three or four inches in diameter.

X Q. 101. How was that fan applied to the instrument Exhibit E ?

A. The fan was placed in a box. The reeds were placed in the square hole. The box with the fan in it was situated immediately over the reeds.

X Q. 102. How many reeds were there ?

A. I think I did not have more than two at any one time in the instrument.

X Q. 103. In which direction did the shaft of the fan run ?

A. It was probably both ways. I can't say about that. The box was loose.

X Q. 104. For what purpose was the large round hole in the deck of the instrument used ?

A. I believe it was for the purpose of driving the fan [by wind] passing into or coming out of the bellows.

X Q. 105. For what purpose was the small round hole used ?

A. To the best of my recollection the same purpose.

47 X Q. 106. How could this fan be operated in connection with this instrument, Exhibit E, by a weight ?

A. The weight was connected to the driving-wheels used in connection with the tin fan.

X Q. 107. Where did the weight run down in the instrument, Exhibit E ?

A. The weight which gave motion to the wheels passed over a pully on the corner of the case, and, I think, ran down outside of the instrument.

X Q. 108. Are the bellows attached to Exhibit E force-bellows or exhaust-bellows ?

A. I am not well acquainted with the terms used to describe bellows. I presume they are force-bellows ?

X Q. 109. Did they drive the air up through the reeds, or suck it down through the reeds ?

A. They drove it up. I also at one time had them in the form of an exhaust-bellows, in which the air was drawn through the reeds.

X Q. 110. What is the discolored mark around the large hole in the deck of Exhibit E caused by?

A. I do not know, unless it has been used for a valve.

Redirect by Mr. Valentine:

R. D. Q. 111. You have stated that you did not regard either of the fans, as then applied by you, as a perfected invention. Did anything remain to be done to your fan to complete its utility, except to perfect and adapt the means of turning it?

A. So far as the effect of the fan is concerned, it was all we desired. The means of turning it was not complete.

R. D. Q. 112. Did you receive any suggestions from Smith as to making your fan; or did you merely go to him for his opinion of its utility?

A. Mr. Smith gave me no suggestions as to the construction of the fan. Having described the tremulo as best I could to him, I asked for his opinion in regard to its utility.

48 R. D. Q. 113. While the fan remained in your shop, after it was brought back from Smith's factory, was it where it could be seen by persons coming into your shop; and do you know whether it was so seen by different parties?

A. The fan that I brought from Smith's, though in a public place, not concealed, was, however, I think, not seen by many. It was seen by some. The other one was seen by many; that is, the wooden one, and I was asked many times what it was for.

R. D. Q. 114. Did you explain its use and operation in answer to these inquiries?

A. Sometimes I did.

Recross by Mr. Betts:

R. X Q. 115. State the names and residences of any persons to whom you explained the use and operation of either fan.

A. They were mostly my neighbors and customers. I do not remember, that I think of now, individual instances.

Redirect by Mr. Valentine:

R. D. Q. 116. When were you first applied to by the defendants herein, or by any one in their behalf, to learn what you could testify in regard to the invention that you have been describing?

A. On Thursday of last week, I think.

Recross:

R. X Q. 117. How do you fix the time when you made the first fan?

A. I fix it by a circumstance which happened in 1857, and know that it was a year or two before that.

R. X Q. 118. What circumstance do you allude to?

49 A. I met Mr. H. K. White at Washington; was talking with him in regard to a music-class just started, which I know was in 1857.

R. X Q. 119. How do you know that this conversation with Mr. White was in 1857?

A. The music-class was formed immediately after a revival at Mansfield Baptist church. I, myself had joined the church, and was teaching the class. It was the winter of 1856 and 1857.

R. X Q. 120. How do you know that you made the first fan one or two years before the winter of 1856 and 1857?

A. I made the fan while a man by the name of Thomson was at work for me, and he stopped work during the winter of 1855–'6.

W. KARR.

SAMUEL S. THATCHER, a witness, of lawful age, produced on the part of defendants, being by me first duly cautioned and sworn to testify the truth, the whole truth, and nothing but the truth in the matter of controversy herein, and being examined by Mr. B. E. Valentine, counsel for defendants, deposes and says as follows:

Q. 121. What is your name, age, residence, and occupation?

A. My name is Samuel S. Thatcher; age, forty-four; residence, Washington, Warren County, N. J.; occupation, melodeon-maker.

Q. 122. How long have you lived in Washington, and how long have you been engaged in that business?

A. I have lived in Washington my life-time, and have worked at that business some seventeen or eighteen years.

Q. 123. Did you ever work for Smith & White; and, if so, when?

A. I worked for Smith & White some eight or nine years; from about 1850 upward. I may have worked for them before that time.

Q. 124. What work did you do?

50 A. I did all parts of it, but principally what is called action-work of melodeons. Sometimes it is called trap-work.

Q. 125. Did you ever make any tremulo-attachments for melodeons while working there?

A. I made two or three.

Q. 126. At what time?

A. To the best of my knowledge it was in 1855.

Q. 127. Describe the attachments which you made.

A. There is a fan in that instrument, (Complainants' Exhibit C,) which is as near like it as I can describe it. It was a shaft made out of pencil cedar, the wings made out of veneering. It was hung with two boxes, that is, hung on gudgeons, or the extremities of the shaft. The extremities of the shaft played in boxes.

Q. 128. About how long were they?

A. I don't recollect, but not over two feet long; probably not as long.

Q. 129. Were they more than one foot long?

A. Yes, sir.

Q. 130. How were they placed in the instrument, as compared with the fan in Complainants' Exhibit C?

A. They were placed as near like that as I can recollect, back of the reeds.

Q. 131. How did it run with reference to the line of reeds?

A. It run parallel with the reeds.

Q. 132. How, with reference to the keys?

A. It run in behind the keys, arranged the same with the keys, parallel with the keys behind, just as that one does in Exhibit C.

Q. 133. State whether or not the line of direction was at right angles to the line of length of each individual key, as in Exhibit C?

A. I think it was.

Q. 134. What was the effect of the fan upon the sound from the reeds?

A. It produced the tremulo sound.

51 Q. 135. Was the effect produced the same as is now produced by the fan in Exhibit C?

A. The effect is the same.

Q. 136. How many of these fans did you make and apply, to the best of your recollection?

A. Two or three.

Q. 137. Did you apply the same fan to more than one instrument?

A. I think we did.

Q. 138. Did you regard the effect produced, that is, the tremulo, a complete invention?

A. I did not.

Q. 139. In what respect was it deficient?

A. I did not think that it made a very musical noise at that time.

Q. 140. Did anything remain to be done to complete its utility, as far as producing the tremulo was concerned?

A. I don't know that there did; the effect was there.

Q. 141. Were these fans placed upon the regular-built melodeons, such as were turned out by the factory?

A. They were. I would state, in a melodeon of the kind called a piano case melodeon, there is a pumper. We had to make that a trifle more narrow to get the fan in.

Q. 142. During how long a time were you engaged in applying these fans?

A. Probably a week or ten days.

Q. 143. Were these fans, as applied to the melodeons, seen in operation by many persons?

A. They were not kept secret. I suppose they were seen. There were a great many persons—shop-hands and a great many persons coming in. I cannot recall the names of the persons, more than it was worked in public.

Q. 144. Did Smith express himself as pleased and satisfied with the invention?

(Objected to as hearsay.)

A. I think that Mr. Smith had not much opinion of it at that time.

52 Q. 145. Under whose instructions did you make the fans?

A. I am under the impression it was White & Smith, the firm I worked for then. I don't know whether it was one or both of them.

Q. 146. Were the melodeons to which you applied them the same in construction as Exhibit C, as far as regards the socket-board and kind of bellows?

A. No, sir; there are so many kinds of bellows to melodeons and organs, that you can hardly distinguish between them; they are all suction-bellows, but are placed in different positions. It was used on suction-bellows. They had a socket-board. The principle is the same, but the construction of the bellows is different.

Q. 147. Is the only essential difference in the position of the bellows?

A. Yes, the position and the shape—the position which way it is placed.

Q. 148. Was the objection to the tremulo which you have spoken of, that it did not produce a tremulous note, or was it that the tremulous note, when produced, was not liked?

(Objected to as leading.)

A. The tremulous note was not liked—was not appreciated.

Q. 149. For how long a time did these tremulo-attachments remain about the shop of Smith & White?

A. I think I saw them there probably two years after they were made.

SAMUEL S. THATCHER.

Adjourned to May 25th, at 10½ a. m.

MAY 25TH—10½ *a. m.*

Present, Mr. Betts, counsel for complainants; Mr. Valentine, for defendants.

53 Samuel S. Thatcher's examination continued:

Q. 150. What name was given to this fan by the men in the shop?

(Objected to, as immaterial and hearsay.)

A. We had several names for it. It was called Karr's patent, a beater, a quaver; that is about all the names I recollect we gave it. One other name was a fan.

Q. 151. How did this fan operate to produce its effect?

A. It revolved, beat upon the air.

Q. 152. Are you acquainted with R. W. Carpenter?

A. I am, sir.

Q. 153. When did you first meet him, and where?

A. It was nine or ten years ago, at Washington, New Jersey, in the shop of Mr. White. Smith had left the firm at that time.

Q. 154. Was Carpenter at work in the factory when you first made his acquaintance.

A. No, he was not, when I first made his acquaintance.

Q. 155. Was he at work there at any time?

A. He was, shortly after.

Q. 156. State, to the best of your recollection, the year when Carpenter was working there?

A. It is about ten years ago, as near as I can recollect; that would make it in 1860; it might have been 1859.

Q. 157. Had he worked in that factory before the time which you have just spoken of?

A. He had not.

Q. 158. Were the fans, or any one of them which you have described, in the factory while he was there?

A. There was not, to the best of my knowledge. We had moved the shop, and probably they were destroyed at the time.

Q. 159. Do you know, or can you set forth any other matter or thing which may be a benefit or advantage to the parties at issue in this
54 cause, or either of them, or that may be material to the subject of this your examination on the matters in question in this cause? If yes, set forth the same fully and at large in your answer.

A. I don't know that I do. There is a statement made here by me, that Mr. Smith did not think much of the sound the fan produced. I referred to the tone it produced and not to the fan itself. I don't recollect what was said about the fan. It produced the same tone as Complainants' Exhibit C.

Cross-examination by Mr. Betts:

X Q. 160. Under whose direction were the two or three fans you have mentioned made, and attempted to be applied to the melodeons at Smith & White's factory?

A. Smith & White's.

X Q. 161. What are the full names of Messrs. Smith & White?

A. John A. Smith and Henry K. White.

X Q. 162. Do you know whether or not the origin of the attempted application of the fans was the suggestion or experiment of William Karr, who has just been examined?

A. It was.

X Q. 163. Were you present, or did you know of the experiment which Mr. Karr made at Smith & White's factory?

A. I was present at the time it was brought there.

X Q. 164. How long afterwards was it that the first of the two or three fans you have mentioned was made?

A. It might have been two or three weeks; shortly after.

X Q. 165. Were all the fans made about the same time?

A. I think they were.

X Q. 166. Were any one of the fans ever applied to a melodeon in such a way that, as applied, they were regarded by Messrs. Smith,
55 or White, or yourself, as a successful application of the tremulo to a musical instrument, or as what could be regarded as a practical "tremulo-attachment?"

A. They were.

X Q. 167. Which one?

A. One that I made, with wings made of veneering, like that one in Exhibit C.

X Q. 168. How many wings did that one have?

A. I think it had four.

X Q. 169. How did the other fan, or the other two fans that were made, differ from this one?

A. They were made lighter. The one fan was made by starting a groove in the shaft and putting veneering in the groove. I don't recollect whether it had four wings or two.

X Q. 170. Do you recollect distinctly more than two fans?

A. I do not. I am under the impressien I made three, but two I know of—one with a straight groove, and one with a crooked grove.

X Q. 171. What do you mean by the one with the crooked grove?

A. The shaft was the same with the other one, but the groove and the wing was spiral around the shaft. It had the same effect.

X Q. 172. About what were the dimensions of the wings and shafts of each of those two fans?

A. I think one of them was four inches, about, and the other probably three inches. I mean the whole diameter of the fan. The diameter of the shaft was not over, probably, one-half an inch, or five-eighths of an inch.

X Q. 173. When you say that Mr. Smith did not like the tone of the fan, in what particular did he object to it?

A. He objected to the tone it gave.

X Q. 174. Did he think that the fans, as applied, injured the quality of the notes of the instrument?

A. He thought it did not increase the tone.

56 X Q. 175. Did he think that the vibration produced by the fans, in the way you applied them, were deficient in necessary regularity to be effective?

(Objected to.)

A. I don't think that he did.

X Q. 176. In what particular, then, did Mr. Smith object to the tone?

A. The peculiar noise that it made at that time. We thought it a rather singular noise.

X Q. 177. Was that the reason that Smith & White gave it up after trying the fans for a short time?

A. That is the only reason that I know of.

X Q. 178. Were any of the methods of applying these two fans to the melodeons which you used, regarded as sufficiently practical to bring fans into use?

A. I think they were.

X Q. 179. Which ones?

A. It was the ones like the one in Exhibit C. The one that we lastly put in.

X Q. 180. In what way was the fan applied to the melodeon?

A. I think with a weight.

X Q. 181. As that fan was applied to the melodeon, was it within the control of the operator on the instrument, so that he could use it from time to time as he saw fit, without stopping his playing to wind it up?

A. I think it would run some time—I cannot tell how long. It would wind and run down. The length of time I could not say.

X Q. 182. Was there any means of stopping it after it had commenced to run, and then setting it a-going again when the operator desired to use it?

A. I don't recollect.

X Q. 183. Did not the fan, in all cases, have to be wound up and managed by some person other than the party who was at the time playing on the instrument?

57 A. I think the player would wind it up before he commenced to play, and when he saw proper would let it run. There was another way. That way was to run it like an old-fashioned turning-lathe. That, I think, did not answer a very good purpose. The object was to run it with the foot.

X Q. 184. That method of running it was not practically successful, then?

A. There was one way or the other, I could not say. It might have been the other way that was not successful.

X Q. 185. After trying the several ways of applying and running the fan you have mentioned, did not Mr. Smith finally get disgusted with it, and tell you to "pitch the thing out of the window;" that "it would not work," or words to that effect?

A. He was disgusted with the tone it produced. I don't recollect him saying anything about the machinery. I got disgusted with it myself. I did not like the noise. His expression was: "Pitch the damn thing out;" but he had reference to the tone it produced.

X Q. 186. After trying these experiments in 1855, did Smith & White and yourself abandon the fans or cease to make any attempt to apply them to the melodeon?

A. I don't remember that there was any other attempt made in the shop to apply the fans.

X Q. 187. What became of the fans?

A. They were around the old shop at Brass Castle till a new shop was built, and we moved up into the village.

X Q. 188. Were they regarded as of any value or practical importance?

A. I don't think they were.

X Q. 189. When you moved the shop were they destroyed as things of no value?

A. I do not know, sir, what became of them. I never saw them after we were in the new shop, to my recollection.

58 X Q. 190. From that time until you saw the exhibits in this case, did you ever see any other tremulos similar to those you made?

A. I never saw but one.

X Q. 191. What and where was that?

A. It probably was in the neighborhood of two years ago, near Port Jervis, N. J., in an Estey organ, I think.

Redirect examination by Mr. Valentine:

R. D. Q. 192. You have stated that one way in which you ran the fan was like an old-fashioned turning-lathe. Please examine the drawing, Exhibit 3, (which we offer in evidence,) and state whether the melodeon as run in that method, resembled or differed from the mode represented by the drawing.

A. That is something like it.

R. D. Q. 193. In what way, if any, does the drawing differ?

A. I don't see that there is any difference. We had a pedal; probably that is about all the difference.

R. D. Q. 194. What do you mean by a pedal?

A. I mean a pedal to be used by the foot.

Recross by Mr. Betts:

R. X Q. 196. Did you ever see a turning-lathe run with a rope around a shaft?

A. Yes, sir.

R. X Q. 197. Did you have any spring to bring the pedal up again?

A. I don't recollect.

R. X Q. 198. Was not the apparatus you have described simply a cord wound around the shaft, with the end attached to a pedal, by which you could draw the cord off once, and then would have to wind it up again on the shaft by hand, just as you did the weight-attachment?

A. I do not recollect about that matter.

59 R. X Q. 199. Would you regard either the weight or the pedal method of operating the fan, as you remember them, as sufficiently practical and easy to be controlled, to sell in the market as an ordinary attachment to an organ or melodeon?

(Objected to.)

A. I think that we had that part of it; the running of this fan, either the one way with the weight or with this last attachment. We could at that time, but now our arrangement would not probably be sufficient. There are improvements in this thing.

R. X Q. 200. Do you remember the method of operating those fans by a weight or pedal so distinctly that you could now, from your recollection, attach a fan to a melodeon or organ, in exactly the same way in which you did it then, in all its parts?

A. I might or might not. It was not my suggestion making this machinery, but only part of it. Part was my suggestion, part Mr. Smith's, and part Mr. White's. I did the work.

R. X Q. 201. Then I understand you, that you could not now, merely from recollection, attach a fan to a melodeon, and say with certainty, that that was the way in which you applied it in Smith & White's factory, in 1855?

A. I might or might not. I might err in some things. In working at it, sometimes building one part might call for another and bring the thing to my mind.

SAMUEL S. THATCHER.

WILLIAM THATCHER, a witness, of lawful age, produced on the part of the defendants, having been by me first duly cautioned and sworn to testify the truth, the whole truth, and nothing but the truth in the matter of controversy herein, and being examined by Mr. Valen-

60 tine, of counsel for defendants, deposes and says as follows:

Q. 202. What is your name, age, residence, and occupation?

A. William Thatcher; age, fifty-three; residence, Washington, New Jersey; and occupation, sawyer, at present.

Q. 203. Did you ever work for the firm of Smith & White; and, if so, when?

A. I did; it was during the years 1855 and 1856, to the best of my knowledge.

Q. 204. What was your work?

A. Bellows-maker and action-fitter on melodeons.

Q. 205. While working there did you ever see any tremulo-attachments on their melodeons?

A. Yes, sir.

Q. 206. Describe them.

A. It was a fan similar to the one in Exhibit C. It revolved by means of a cord drawn out, which was wound upon the shaft.

Q. 207. What was the effect produced by the revolving-fan?

A. It formed a tremulant sound.

Q. 208. How many of these fans did you see there applied to melodeons?

A. I think there were two.

Q. 209. Did the effect produced by the revolving-fan resemble or differ from the effect produced by the revolving-fan upon the sound from the reeds in Exhibit C?

(Witness, hearing Exhibit C played, answers:)

A. I should consider it the same thing.

Q. 210. In what year was this?

A. It was between the periods of 1855 and 1856, to the best of my knowledge. It might have run into 1857, for what I know.

Cross-examination by Mr. Betts:

X Q. 211. In what year did you stop working for Smith & White?

61 A. I think I did not work for them after 1857?

X Q. 212. You say you saw a fan operated on a melodeon by having a cord wound around the shaft, and then drawn off. How was it drawn off?

A. By the hand of the operator.

X Q. 213. How could he play while drawing the cord off?

A. He was only getting the sound, using one hand.

X Q. 214. What you saw, then, was only an experiment, was it?

A. Yes, sir; as far as I know, it was.

X Q. 215. Did you see this experiment tried more than once?

A. Yes, sir; I think I did.

X Q. 216. How many times?

A. I could not say.

X Q. 217. Do you know what was thought of the result of the experiment at Smith & White's factory by Smith & White and others?

A. The tremulo was considered as good as could be; but they did not think it added to the utility of the instrument.

X Q. 218. Did you see or know of all the experiments that were tried with these fans while you were at the factory?

A. I don't know that I did. I think probably not.

X Q. 219. After trying the experiments with the fans do you know whether they were abandoned?

A. I think about that time the business changed hands, and the shop was removed; and what was the consequence after that I don't know.

X Q. 202. Did you ever see any fans applied to any organs after that?

A. No, sir; I think not.

X Q. 221. Do you know whether, after trying the experiment, the fans were thrown aside as of no practical importance or value?

62 A. I could not say as to that. I stopped work in the shop after it was moved.

X Q. 222. Did you ever, after that, hear anything more about them?

A. I don't know. I think I did hear occasionally tremulos spoken of as neighborhood talk.

Redirect by Mr. Valentine?

R. D. Q. 223. Were the tremulos spoken of by the neighbors referred to as the same that they had seen in Smith & White's shop?

(Objected to as hearsay.)

A. I think they were called "Karr's patent."

WM THATCHER.

Defendants' counsel offers in evidence certified copy letters-patent, granted to Layfayette Louis, dated November 11th, 1856, No. 16094.

Received in evidence, and marked Defendant' Exhibit No. 4.

Defendants' counsel offers in evidence certified copy letters-patent, granted to Riley W. Carpenter, dated June 4th, 1867, No. 65,472.

Received in evidence, and marked Defendants' Exhibit No. 6.

63 At a stated term of the circuit court of the United States of America for the southern district of New York, in the second circuit, held at the United States court-rooms in the city of New York, on Thursday, the thirtieth day of March, in the year of ou rLord one thousand eight hundred and seventy-one.

Present, the honorable Samuel Blatchford, circuit judge.

ALONZO HITCHCOCK
vs.
CHARLES M. TREMAINE ET AL.

This cause coming on to be heard on the pleadings and proofs:

Mr. Benjamin E. Valentine and Mr. George T. Curtis argue the case on the part of the defendants.

Mr. Frederic H. Betts argues, in reply, on the part of the complainant'.

FRIDAY, *March 31st*, 1871.

The court meets pursuant to adjournment, and is opened by proclamation.

Present, Judge Blatchford.

64 ALONZO HITCHCOCK
vs.
CHARLES M. TREMAINE & AL.

This cause being still on argument:

Mr. George T. Curtis argues the case on part of the defendants.

Mr. F. H. Betts argues, in reply, on part of compl't'.

65 At a stated term of the circuit court of the United States, held in and for the southern district of New York, at the city-hall, in the city of New York, on the 23rd day of May, 1871.

Present, Hon. Samuel Blatchford, district judge.

ALONZO HITCHCOCK, GEORGE G. SAXE, & James H. Robertson
vs.
CHARLES M. TREMAINE AND WILLIAM B. TREMAINE.

This cause came on to be heard at this term, and was *agreed* by counsel, and thereupon consideration thereof, it was ordered, adjudged, and decreed—

That, prior to the 27th day of June, 1865, one R. W. Carpenter was the true, original, and first inventor or discoverer of a certain new and useful invention, to wit, a tremolo-attachment to musical instruments.

That letters-patent of the United States were duly issued to said Carpenter for said invention, bearing date the 27th day of July, 1865, and numbered 48366.

66 That said letters-patent were afterwards duly assigned to the complainants and by them duly surrendered, and new letters-patent of the United States duly issued to them for the same invention, bearing date the 18th day of May, 1869, and numbered 3444.

That afterwards said new letters were again duly surrendered by the complainants, and again re-issued and new letters-patent of the United States duly issued to them for the same invention, bearing date the fifth day of October, 1869, and numbered 3665.

That the complainants are entitled to the exclusive use of the said invention and improvement.

That the defendants, Charles M. Tremaine and William B. Tremaine, have infringed said letters-patent, by having sold or caused to be sold one more musical instrument having tremolo-attachments constructed, by combining with said instrument or instruments a rotating-fan, arranged at right angles to the keys and parallel to the line of reeds, and actuated by means equivalent to those shown in the complainants' patent, to wit, by a wind-wheel, and also by having sold or caused to be sold one or more musical instruments having tremolo-attachments constructed, by combining with said instrument or instruments a

67 hollow rotating-cylinder with a horizontal axis, having two openings in it opposite each other, and extending from end to end of the cylinder, said cylinder being actuated by equivalent means to that described in complainants' patent, and arranged at right angles to the keys and parellel to the line of reeds.

That the complainants are entitled to a perpetual injunction restraining the defendants from making, using, or vending either of said tremolo-attachments combined with musical instruments or otherwise, or from otherwise infringing said letters-patent, by making, using, or vending the application of means to the instrument by which the air may be agitated to produce a tremulous note, as described in said letters-patent, or by making, using, or vending the arrangement of a fan or agitator in the instrument at right angles to the keys, and parallel to the line of reeds or pipe-mouths at any convenient distance from them, as described in said letters-patent.

That the complainants are also entitled to an account of the profits derived by the defendants from said infringements, and that it be referred to Mr. Joseph Gutman, jr., a master of this court, to take and state said account accordingly, and report thereon with all convenient speed.

68 That the complainants are also entitled to the costs of this suit.

All further directions are reserved until the coming in of the master's report.

SAM'L BLATCHFORD.

(Endorsed:) Circuit court of the United States, southern district of New York. Alonzo Hitchcock et al. vs. Charles M. Tremaine et al. Decree. Matthews & Betts, compl'ts' sol'rs, 31 & 33 Pine st.

GENTLEMEN: Take notice that the within-proposed decree will be presented for settlement and signature to the court on the 23rd day of May, 1871, at the opening of the court.

MATTHEWS & BETTS,
Compl'ts' Sol'rs.

Filed May 23, 1871.

69 Circuit court of the United States, southern district of New York
In equity.

ALONZO HITCHCOCK ET AL.
vs.
CHARLES M. TREMAINE ET AL.

Testimony taken on reference before Joseph Gutman, jr., master under decree for accounting of May 23, 1871.

N. Y., MAY 27, 1871—1 *p. m.*

Present, Mr. Betts, complainants' counsel, and Mr. Valentine, counsel for defendants.

Mr. Betts puts in evidence copy of decision and decree. It is marked Exhibit A.

CHARLES M. TREMAINE, one of the defendants, having been duly cautioned and sworn, deposes and says:

I am one of the def'ts in this suit. My business is the sale of musical instruments, including organs and melodeons. I was not the
70 agent for R. Burdett & Co. for New Jersey and some Southern States. I was not their agent at all for any territory; not directly at all. I bought and sold the organs of R. Burdett & Co., of Chicago. I bought their organs. I bought them of Messrs. Lyon & *Ely* [Healy,] of Chicago, who are the general agents. We were the agents of Lyon & Healy for the territories of northern part of New York, and for a portion of Pennsylvania; for city of New York; for eastern part of Penn'a, except Philadelphia, Pa., and for New Jersey, except near Phila' and Connecticut; Southern Atlantic States. We had the privilege of working. We had a written contract with Lyon & Healy through the agent with whom we made the arrangement. We had previously sold the Shoninger organs. We dropped the Shoninger organ about the time we took up the Burdett, by degrees. This was the organ manufactured by the B. Shoninger Melodeon Co., of New Haven, Conn., and sold by B. Shoninger & Co., of New Haven. The Burdett & Shoninger organs are the ones for sale of which this suit was brought; that is, those
71 containing the tremolo.

Q. Did you pay any of the expenses of this suit?

(Objected to; objection overruled, & exception noted.)

A. I do not know that we have. I do not know how to answer. I suppose that we are bound to pay it. We have had no arrangement.

We had no bills sent in to us. We have a bill-book showing organs we bought of Shoninger & Co. We had no arrangement with Burdett & Co. as to price; did not arrange with Burdett & Co. at all; had with *Lyon and Ely* [Lyon & Healy] an arrangement, through their agent, with whom we drew the contract. We had a written contract about the organs. This is the same contract I spoke of before. We had only a verbal arrangement with Shoninger & Co. as to price of organs bought from them.

Q. What was the arrangement with Shoninger & Co.?

(Objected to; exception.)

I cannot answer that; it is so long since we bought any of them.

72 I cannot tell without referring to the bill-book. I can tell by reference to the book. We had a small price-list of Shoninger & Co., representing his organs.

The sales-books will show the amount of organs sold by us that we had from Lyon & *Ely* [Healy] & from Shoninger & Co. I have with me our bill-book. I produce it in evidence. (It is marked Exhibit B.) I have also the sales-book and produce it. (It is marked Exhibit C.)

The pamphlet shown me is our circular with the price-list torn out. I do not know when that was issued; perhaps a couple of years ago. We have had another circular and price-list since that. This has no price-list on it.

I have no other books with me. (Circular put in evidence subject to exception, marked Exhibit D.) I produce price-lists of Burdett organs, and subsequent price-lists of Shoninger & Co.

(Shoninger price-list put in evidence, marked Exhibit E; [exception] by def'ts.) This is not complete so far as Shoninger's instruments

73 are concerned; it is all we issued. I cannot say whether it contains the prices of all of his instruments that we sold. We have no other price-list that I am aware of of Shoninger's instruments. (Burdett price-list put in evidence, and marked Exhibit F; exception.)

I have no other papers with me. I cannot tell the arrangement with Shoninger without the bills and letters we have had from them.

(Witness directed by the master to produce the bills and letters referring to the prices and also the written agreement with Burdett. (Exception [by def'ts.]) All the Burdett organs were bought of Lyon & *Ely*, [Healy,] with some few exceptions. In one or two cases we purchased back from parties who had bought them. They all came from Lyon and Healy originally.

(Adjourned to June 2, at 1 p. m.)

N. Y., JUNE 2, 1871—1 *p. m.*

Present, counsel as before and the witness, Charles M. Tremaine.

Witness further examined:

74 I have the agreement with Lyon & Healy with me. I produce it. (It is put in evidence, marked Exhibit G.)

(Objected to by counsel for defendants; exception.)

I had no written agreement with Lyon & Healy regarding the purchase of organs from them.

(Objected. Exception [by def'ts.])

A. We had two different arrangements, one as to organs with the tremolo, and one as to organs without. The organs with the tremolo were to be charged $12.50 extra; that is the whole arrangement except in regard to payment.

Q. Is it not a fact that you bought of Lyon & Heally, at fifty per cent. off from their regular price-list of all the Burdett organs, in which price-list the organs with the tremolo-attachment connected with them were in each case $25 higher than the same style of organs without the tremolo-attachment?

A. Yes. The price-list now shown me is the price-list according
75 to which are bought the Burdett organs, at 50 per cent. off from these prices with perhaps a few exceptions.

(Price-list offered in evidence, marked Exhibit H.) What I meant by exceptions is, that there might be one or two kinds not in this list. We bought organs according to that price-list when we bought, excepting 30 and 31; for those the list-price H is $50 higher than what we bought at. I think all the styles on the list from 15 up were furnished with the vox-humana tremolo. The reason for the $50 less, on 30 and 31, than the price-list price, I suppose was to get us to take hold of them.

Q. Taking as an example your sale entered in your sales-book, Exhibit C, under date of Nov. 5, 1870, of two styles, 9 Burdett organs, at $225, do you not mean by the entry under that date that you sold the style of organs corresponding to No. 9, in Exhibit H, at the price marked in Exhibit H, less a discount which you have noted under that date of
76 35 per cent?

A. Yes.

Q. Is that an example of the corresponding entries in other cases of sales?

A. Yes, sir. By the entry under date of Nov. 23rd, 1870, where I say one style, 26 Burdett organ nett, $153.34, on the book, I mean a case where we probably sold to some one who had just that amount to pay; that it was sold at that price without any regular arrangement as to discount; nett means that in some cases. By nett is meant there that we made no special arrangement as to discount, but agreed as to some particular price. The difference in cost of pipe-top organs and others is near $100—$80 or $90.

Q. Look at the entry under date of March 26, 1870, pipe-top organ, style 30, nett $600. Which was the regular price of that according to your price-list?

A. $600 is the regular price of the organs. The regular price of organ No. 14894, sold March 15, 1870, was $425. The regular
77 price of organ No. 14723, sold March 26, 1870, was $275. The regular price of organ No. 14141, sold same date, was $650. The regular price of organ No. 14726, sold same date, was $275 as entered. The regular price of organ No. 14772, sold on same date, was $280; the price of stool, which is included in the sale in the book, I cannot remember. I have not the circular and price-list with me which we got out after Exhibit D. Exhibit D had the price-list, Exhibit H, in it, and was part of it. I have with me no other circular & price-list. We got out two; the other does not differ much from Exhibit D. (Witness directed to produce second circular and price-list at next meeting by master.) We purchased from Lyon & Heally no other than the Burdett organs. I have no letters or bills with me showing arrangement with Shoninger & Co. We have nothing except what is in the bill-book, Exhibit B. It was a verbal arrangement at 5 % off, and 5 % additional off for cash. We sometimes paid cash, sometimes bought on time. The invoice-book will not probably show. We generally paid cash.
78 There were some instances in which we did not pay cash. The organs we bought of the Shoninger Co. were bought at 50 % off

from the price-list, Exhibit E. I presume we bought also from them some styles not mentioned in Exhibit E. I think they have made some styles not on that exhibit. I do not think that Shoninger made any difference in the price of organs with tremolo on or off. In Exhibit E, the $10 more charged for organs with tremolo on, is that he charged extra for the tremolo as I see by the list. I see he does make a difference in price. Besides Exhibit E, I believe we had no other price-list of the Shoninger organs. In the books where a sale of Tremaine organs is entered, some of them were the Shoninger organ. The New Haven Organ Co. organs entered are not the Shoninger organs. In the price-list of Shoninger & Co., now shown, I cannot say whether the prices correspond to those at which we bought. That list is a new list to me. The price of the 4-octave organ at the time we dealt with them
79 was what it was billed to in the bill-book, nett $42.50; that had no tremolo on. All the 5 and 6 octave organs of Shoninger & Co., had not the tremolo in them. We have sold Shoninger organs without the tremolo. We sold 16 without and 23 with the tremolo since October 5, 1870.

On the books the numbers are the distinguishing characteristics of organs with and without the tremolo.

Q. How do you know by the numbers?

A. The styles with the tremolo are a different number according to the price-list than the same style without the tremolo.

Adjourned to June 7, 1871, at 11 a. m.

80 JUNE 7, 1871.—11 *a. m.*

Present, counsel as before.

Examination of the witness, Charles H. Tremaine, resumed:

I was mistaken when I said we had sold 23 Shoninger organs. I find that were but 22. I have with me and produce the new price-list called for at the last meeting. Style 31 is not the list; its price was $475. The list is the same as Exhibit F, already in evidence.

Cross-examination by Mr. Valentine:

In the testimony which I have given about these organs, my answers have referred to organs sold with the tremolo and also without the tremolo. We have sold both Burdett and Shoninger organs, both with and without tremolo. We have bought Burdett and Shoninger organs both with and without tremolos. Where we bought an organ (Burdett) with the tremolo we paid in accordance with our contract only $12.50 more than for the organ without tremolo; and organs without tremolos cost within $12.50 as much as the organs with tremolo. When
81 we sold the Burdett organs, we made a distinction between those with tremolos and those without. When we sold them to our regular agents they were billed at $25 extra with a discount off, of 35 % off, some 40 % off; it is not so marked in the books. There was no distinction made with Shoninger as to our arrangement with them when we bought of them. We went according to the price-list. In each Shoninger organ that we bought the tremolo was in. I can from my books make a statement showing the exact price which each tremolo-attachment cost us and what we sold them for.

And being further examined by Mr. Betts:

Red. We never paid Lyon & Healy any less than $12.50 additional for the tremolo-attachment to the organs purchased of them. We never

paid them less than 50 % off for the organs excepting the two cases spoken of. Never paid them less for cash than for time purchases. Shoninger did not charge us any more for organs with the tremolo on then with the tremolo off.

82 Adjourned to June 10, 1871, at 1 p. m.

N. Y., *June* 10, 1871.

Present, counsel as before.

The witness Tremaine being further cross-examined:

Re-x. The paper now shown, marked Exhibit 1, is a correct statement of the costs, the prices at which sold, the prices received, and the total profits from our sales of the tremolo-attachments connected with the Shoninger organs?

A. The book-keeper can tell that better than I can. We left all the accounting to him. Our business was not confined to selling organs, but we sold large numbers of pianos also.

Redirect by Mr. Betts:

Red. We have not sold any Burdett or Shoninger organs unless entered on our books, except by oversight, if it has occurred. None of our agents ordered direct from Lyon & Healy and paid us the difference. The books I have produced are, so far as I know, complete books of
83 all our business in the sales of organs. The tremolo in Burdett organ has not been the leading feature of that organ. The leading features have been the celeste stop, the violincello, the campanilla perfectione, and the general quality and tone regulating the instrument. I do not consider that the tremolo has been a leading feature. We charge extra for all the other stops and features that I have mentioned. Some of the Burdett organs are mentioned without any of the attachments I have mentioned. Some of the cheaper styles—the first three or four on the list—are made without any of the attachments. The vox-humana attachment on the price-list are $25 more than the organs without, retail. The campanilla is $50 more. They are all of them from $25 to $50 more than without. The difference between No. 29 and No. 30 is $25. (Exhibit H.) In 29 A, (Exhibit F,) there are six stops. In 30 A there are eight stops. All the difference is the number of stops; there is one more stop besides on the 30 A, which swell can be procured as well without the stop, with the knee. Sometimes we call that stop forte. It gives the same effect as the swell used by the
84 knee. It is of not much account. Sometimes they put it flute, as in 30 A. Flute and forte amount to the same thing.

In style 26 B, the celeste stop is charged extra for. Exhibit D was taken from the list, not written by me; we published it for sales.

I have not recently been to Saxe & Roberts to get permission to use the vox humana. It is not a fact that we cannot sell our instruments without the tremolo. We are shipping instruments to-day. In every style where the tremulo appears on the list we specify it as Carpenter's vox-humana. In any other stops we have not mentioned the inventor's name. In Exhibit D we emphasize the vox humana. I do mean to say that it is not a leading feature. I do not think that 50 % of the sales of the Burdett organ is due to this tremulo, that is not the feature of the Burdett organ.

Further cross-examination by Mr. Valentine:

Re-x. There are 2 distinct forms of Carpenter's vox humana tremulo;

85 one is a fan and the other is a roller. There are three or four different kinds of tremolos, which can be attached to organs.

CHARLES M. TREMAIN'.

BENJAMIN E. VALENTINE, called as a witness and being examined as a witness by Mr. Betts, counsel for complainants, deposes and says:

I have not been to plaintiffs' to procure a license on the grounds that def'ts were greatly embarrassed to get rid of their stock, or could not. I think, on Thursday last, I went to the office of Saxe & Robertson, and stated to them that Messrs. Tremaine, the def'ts had in their warerooms a number of organs with the tremolo-roller attached. I stated to Mr. Robertson that I would like to know what sum he would take to allow us to sell those instruments in their present condition; that the def'ts had estimated the cost of putting on an entirely different tremolo-attachment; and if we could make an arrangement to sell the organs without making the change at an expense no greater than
86 it would cost us to make the change, we would like to make such an arrangement as a transaction entirely distinct from these legal proceedings which are pending, and which would be without prejudice to either, it being merely a question of economy. Mr. Robertson answered, that it did not make much difference to him; that he would see Mr. Hitchcock, and let me know in a few days.

B. E. VALENTINE.

ALONZO HITCHCOCK, a witness called on behalf of complainants, having been duly cautioned and sworn, and being examined by Mr. Betts, says:

The list now shown me is as correct a list as I could make from the def'ts' books of their sales of Burdett organs. I only went over it once. The 1st column indicates the date of sale; the 2nd the style; the 3rd the number; and the 4th column the price; and after that rates of discount, or other remarks regarding sale. It is put in evidence, marked Exhibit I. I have copied none that were marked failures.

87 And being cross-examined by Mr. Valentine:

X. I think I have copied the list as it was in the book. It is possible that some instruments that I have on that list may have been sold twice.

ALONZO HITCHCOCK.

Examination further adjourned to June 14, 1871, at 3 p. m.

N. Y., JUNE 14, 1871—3 *p. m.*

Present, counsel for the parties as before.

The witness Hitchcock being further cross-examined by Mr. Valentine:

X 2. What do you charge for the tremolo to Este & Mason & Hamlin?

(Objected to by Mr. Betts. Question ruled out. Exception.)

DEFENDANTS' TESTIMONY.

JOHN M. TREMAINE, produced on the part of the def'ts, being
88 examined by Mr Valentine, says:

I am book-keeper for def'ts. Have kept their accounts ever since they have been in their present business. I have prepared a statement of the receipts & sales of def'ts of Burdett organs. I produce the statement which I have prepared. It is correct, and made from the books.

(Statement put in evidence. marked def't's Exhibit 2.)

Q. Is this statement a correct account of all the Burdett organs, with tremolo-attachment, sold by def'ts, by the style, number, date of purchase, cost of organ, cost of tremolo, date of sale, price received for organ, and price received for tremolo?

A. Yes; unless there may be some clerical errors.

Q. The total price paid for all tremolo-attachments bought and sold by def'ts was $2,750. The gross amount received was $3,756.31. The difference is $1,006.31. Out of that sum there has been no ap-
89 portionment of allowance for expenses of the business. The prices paid are the prices we paid in Chicago. The price received is the price delivered to purchasers. I have not computed the expense of freights here.

Q. Were you charged freight by weight of the instrument?

A. Yes.

Q. Did you employ clerk-hire to exhibit the tremolo?

Q. Did you employ agents to exhibit that tremolo?

(Objected to. Withdrawn.)

Q. What was the total amount of your sales of all musical instruments embraced in this business?

(Objected to as immaterial.)

Q. Did you make special advertisements of the tremolo?

Q. What was the total amount of the whole profits of your business during the time covered by this statement?

A. The profits from Jan'y 1 to Dec. 31, 1870, were $2,790.52, and no more. The profits for the remaining 7 mo's would be no greater
90 in proportion. That was the profits on organs without tremolos, pianos, &c.

Q. What was the total amount of sales during that period?

(Objected to. Question ruled out. Exception.)

Where I have noted on the statement organ returned, it was an exchange for one tremolo-organ for another. They are not included in the addition; it is put in but once. Only the second sale is included. In some cases I have made memorandum "advertizing." Where we pay cash for advertizing we get 50 % off from the regular price; but we made some contracts where we took organs at the regular price, and paid in organs at the regular price. In that case there are no profits on the organ. In cases where discrepancy appears in the amount on books and amount on this statement, the statement represents the real money basis of the transaction, and where the organ is put on the books as sold at full price, and payment taken in advertizing, the result is the same as though we had paid full price for the organ. This is
91 the case in all cases where the statement is marked advertizing.

The organ given on money basis exactly the same as we paid for it. Some of these organs were sold in the South. One of the partners went with them with a concert troupe with a view of advertizing the organs. In those cases there was no profit made on the instruments.

Most of those organs were sold to churches. We allowed 35 % discount on those organs. We sold many to the troupe, and they sold them

And being cross-examined by Mr. Betts, x'd:

I am the father of the def'ts. Oct. 21, 1869, on sales-book, the price is $283.34 for No. 14975. On the list, Exhibit 2, it is $183.34. That is a clerical error; it should be $283.34. (List amended by master.) The def'ts bought styles 30 and 31 at 50 % off, less $50 from the price on the price-list, I believe; both I think. They paid less than the amounts on price-list, less 50 % off. In this list, Exhibit 2, I have made no deduction for styles 30 and 31, less than the 50 % off for the tremolo. There
92 was an arrangement between def'ts and Lyon and Healy, beyond the agreement for tremolo. The difference is made a basis in the price-list. I do not know whether we ever had 30 & 31 with the tremulo out. I do not know of any special arrangement other than the discount; never heard of any. The price of the tremolo is fixed at a certain specific sum, no matter what organ it goes into.

Sample of Exhibit 2. On sales-book, the item under head of Dec. 1, 1869, organ No. 14602, the discount off was 38 %; have no account of concert-giving here. They were, at that time, reckoned in the general expenses of the business—partially so. I think the store bore a portion of the expenses—not all. Parties sometimes wanted to get a different style of organ, in which case we would take back the one they first bought and give them another one. We usually took them back at the same price paid unless the organ was injured—that is, in an exchange. These exchanges were generally for a higher-priced organ—they paying the difference.

Red.:

The statement of sales of Shoninger organs, Exhibit 1, was made out by me. It is correct, so far as I know, clerical errors excepted.
93 The 50 % off for cash advertisements was procured by my son Charles; he had been in the publishing business.

JOHN M. TREMAIN'.

N. Y., JUNE 27, 1871—12 *m.*

Present, counsel as before.

1. Counsel for defendants offers to prove that all the tremolo-attachments upon the Burdett organs sold by the defendants, and all those upon the Shoninger organs sold by the defendants, contained severally three elements, each of which were patented, viz: In the Burdett organ, the wind-motor, the cylinder, and the element which the court decides belongs to complainants; in the Shoninger organ, the wind-motor, the connection between the motor and the fan, and the complainants' element, in order to show that the sale of the tremolo-attachment embraced a proportionate profit on each of these elements.

(Objection; ruled out; exception.)

Offers to produce exhibits showing these elements.
94 (Exhibits admitted.)

2. The def'ts having testified that they have sold both organs with and without tremolo, and also pianos, offer to show the total amount of these sales of instruments without tremolos, and also the total amount of the profits made in their business during the term embraced in the account.

(Objected to; ruled out; exception.)

3. Def'ts offer to prove the amount of profits which they have made

by the sale of tremolo-attachments during the term embraced in the account by showing the total amount of sales in their business, the total amount of sales of tremolo-attachments, and the total amount of profits in their whole business—the amount of profits upon the tremolo to be obtained by the usual proportion.

(Objected to in present form as a whole; ruled out in its present form, def'ts having leave to make distinct offer of each branch; exception.)

4. Def'ts offer to prove what the proportionate profits would
95 be by making a proportion in which the first term is the amount of sales in their whole business, the second term the am't of profits on their whole business, the third term the am't of sales of tremolo-attachments, and the 4th term the am't of profits sought; the time of all the above transactions being the time mentioned on the accounting.

(Objected to, but not objecting to any evidence of any expenses incurred by def'ts in and due to the purchase and sale of the tremolo-attachments; ruled out; exception.)

5. Offer to prove what the expenses of conducting the business were during the term embraced by the accounting and by a proportion in which the 1st term and 3rd term are the same as in the preceding 4th offer, and the 2nd term, the amount of such expenses, should be deducted from the gross profits resulting from the sale of the tremolo.

(Objected to as offered, but no objection as to proof of any ex-
96 penses incurred in the purchase or sale of the organs containing such tremolos, more than would have been incurred by the purchase and sale of the same organs without the tremolos. Master says that he will admit such evidence, but rules out offer as made by def'ts. Exception.)

Hearing closed.

97 *Descriptive catalogue of the Burdett organs.*

[Picture of combination organ with top.]

New York: C. M. Tremaine & Bro., 435 Broome street.

98 GENERAL DIRECTIONS.

[CUT.]

1. As all reed-organs need more or less care, we deem it not out of place to give a few general rules how to take proper care of them so that they may be kept in good order.

2. Keep the instrument dry and free from dust and dirt, as exposure to dampness and dust is the most prolific source of trouble in reed-instruments of all kinds.

3. It is of the greatest importance that a reed-instrument should be kept at a moderate temperature, and dry.

Do not keep it shut up continually, when not in actual use; but leave it open in fair weather, and always push in the draw stops when not in use. This will keep dust and dirt from getting into and finding a lodgment in and around the reeds.

The one simple rule is to keep the instrument dry and clean.

99 Descriptive catalogue of the Burdett organs, containing Carpenter & Burdett's new improvements, patented June 1st, 1867.

[CUT.]

New York: C. M. Tremaine & Bro., 435 Broome street, 1870.

100 *Price-list of Burdett organs.*

In panelled black-walnut cases, oil and shellac finish, carved trusses, two blow-pedals, and orchestral-swell.

ONE SET OF REEDS.

Style.	Price.
1. Five octaves	$140 00
2. Same, with vox humana	165 00

TWO SETS OF REEDS.

6. Five octaves, four stops, viz, diapason, melodia, viola, flute	170 00
7. Same, with vox humana, five stops	195 00
8. Same as 7, with campanella, six stops	240 00
9. Five octaves, five stops, viz, flute, diapason, viola, sub-bass, vox humana	225 20
11. Five octaves, six stops, viz, harmonic attachment, flute, diapason, sub-bass, viola, vox humana	250 00

DOUBLE CELESTE.

25. Five octaves, two stops, viz, celeste, vox humana	200 00
26. Five octaves, four stops, viz, celeste, forte, sub-bass, vox humana	225 00
28. Same as 26, with harmonic attachment	250 00
24. Same as 26, with campanella, five stops	275 00

TREBLE CELESTE.

3. Five octaves, four stops, viz, flute, celeste, viola, diapason	200 00
10. Same, with vox humana, five stops	225 00
12. Same as 10, with Packard's coupling-arrangement, seven stops	235 00
16. Five octaves, five stops, viz, flute, celeste, viola, sub-bass, vox humana	250 00
19. Five octaves, five stops, viz, flute, celeste, viola, sub-bass, harmonic	250 00
18. Same as 19, with vox humana, six stops	275 00
20. Same as 18, with Packard's coupling-arrangement, eight stops	285 00
21. Same as 18, with Packard's coupling-arrangement, ten stops	300 00
22. Same combination and stops as in 21, in elegant new design upright case	325 00
12. Same as 22, with campanella, eleven stops	375 00

COMBINATION ORGANS.

30. Five octaves on lower manual, three octaves on upper manual, one and three-fifth banks of keys, one octave pedal

bass, eight stops, viz, violoncello, cremorne, celeste, vox humana, sub-bass, harmonic, la perfection, flute..... 425 00

31. Same as 30, with campanella, eight stops, viz, la perfection, violoncello, vox humana, celeste, cremorne, flute, sub-bass, campanella..... 475 00

GRAND COMBINATION ORGAN.

32. Two full banks keys, five octaves, F to F, or C to C, at option of purchaser, hand and foot blowers, twenty-seven notes pedal bass, twelve stops, viz, la perfection, violoncello, bourdon, cremorne, coupler, principal bass, flute, celeste, harmonic, sub-bass, pedal check, vox humana..... 650 00

With addition of pipe-organ top..... $700 and 750 00

This instrument is very powerful, and will fill a church seating fifteen hundred people. We are prepared to place it in competition with any $1,000 pipe-organ.

We claim more power and a greater variety of combination.

Six-octave organs, also rosewood cases made to order.

NATIONAL ORGANS.

A. Five octaves, one set of reeds, with vox humana..... 120 00

B. Five octaves, two sets of reeds, five stops, viz: vox humana, melodia, viola, flute, diapason..... 150 00

C. Same, with campanella..... 200 00

101 *Introduction.*

Our principal aim in submiting this catalogue to the public, aside from its value as an advertisement, is to give such an idea of the character, capacity, and style of our instruments as may be learned without a personal inspection, and thus enable persons at a distance to order the style they would in all probability have chosen were they present at our warerooms. Persons so ordering may rest assured that they will receive as perfect an instrument in every respect as if personally selected from our stock.

The constantly increasing popularity of these instruments, and our inability to supply the demand, has induced the company to extend their manufacturing facilities, by building a large addition to their factory. This being completed, we are happy to announce that we shall in future be able to fill orders with promptness. The Burdett organs have achieved a substantial reputation by their merits alone, upon which we are willing they should stand or fall. We claim for them superiority on the following points, viz:

First. Volume, purity, and roundness of tone, power and variety of expression, approaching nearer the pipe-organ than any other reed-instrument in existence.

Second. Delicacy, elasticity, and promptness of action, rendering them superior to any other reed instrument for the execution of rapid passages.

Third. Their perfection of construction and elegance of case.

Fourth. The orchestral effects which can be given at the will of the performer, and the ease with which they are produced.

102 Many years of study and experiment of the ablest inventors have been combined in what is now offered to the public as the Burdett organ, which has ever been in advance of all others in the requi-

sites to make a perfect reed-organ; so much so, in fact, is this the case, that most of the mechanical and musical attributes of reed-organs have originated with the producers of the Burdett organ; and their previous inventions and improvements have been so copied by other makers, as to cause the very names of their improvements, such as "manual sub-bass," "harmonic attachment," etc., to become everywhere familiar.

The Burdett organs now manufactured contain not only those old and well-known so-called improvements, for which they are so worthily noted, but entirely new ones, especially the "vox humana" of R. W Carpenter, which should not be confounded with his old invention of the same name. The improved "vox humana" used in the Burdett organ requires no extra foot-pedal, has no clock-work attachments, is something entirely novel, and the only practical apparatus of the kind at present used that produces a real imitation of the human voice. These many improvements and mechanical combinations are so compacted and made use of as to cause no increase in the size of the instrument. The present Burdett organ has received the most cordial and highest encomiums from those ranking among the first of musicians and organists.

103 *General remarks.*

As early as the year 1845, Riley Burdett conceived the idea that the common seraphine, or melodeon then in use, could be greatly improved, its value as an instrument of music enhanced, and its usefulness extended; and, working upon the principle of progression, added improvement after improvement, until the Burdett organ has reached its present colossal proportions. We use the word colossal, from the fact that when melodeons first came into use they were of no practical service, but mere curiosities—not so good a toy as the common accordeon. Riley Burdett is the undisputed father of the reed-organ in the Western Continent, and his constant aim has been, and still is, to arrive at the utmost degree of simplicity in its construction, combined with the greatest possible amount of power, and the most perfect variety of combinations, compatible with an extreme delicacy of touch. All these have been made a study, and we can now truly say, that in them the Burdett organ excels all others in the world.

To Mr. Burdett, and to him alone, belongs the credit of first introducing in a reed-instrument more than one set of reeds, and attaching them together in octaves, thereby producing what is called the "harmonic attachment," thus doubling the power, and we shall yet see the time when the Burdett organ will become a family necessity. Its very emotive and sympathetic consciousness with human passion will make it so. It will be found in the cot and at the palace. The hardy yeoman will listen to catch its "sounds from home," as he hies him to his humble roof, and the halls of the rich will resound with its melody. It shall re-
spond when the minister of God calls the worshippers to praise,
104 and its sweet notes shall sooth the sick at heart. Its plaintive
tones will bring a joy to the weary and distressed, and its very name becomes a "household word."

We will now describe, more particularly the before-mentioned improvements, all of which are the inventions of Mr. Burdett.

IMPROVED HARMONIC ATTACHMENT

Doubles the power of the instrument, without increasing its size or the number of its reeds, and when brought into action, simultaneously

with the sub-bass, its effect resembles the sound of a full ochestra suddenly bursting upon the ear.

TRI-REED

Is unlike any other now used—three sets of reeds being used with the common manual, and so arranged that they occupy no more space than two sets of ordinary reeds, thus possessing more power, being more compact, less complicated, and much cheaper than those on any except the Burdett organ.

IMPROVED MANUAL SUB-BASS

Brings into use an independent set of large and powerful reeds, operated upon the common key-board, and is controlled by a stop. It requires no extra space, is a perfect substitute for a pedal-bass, and increases the power of the bass-notes more than two-fold.

This is a very recent invention, an improvement upon a previous patent, and is unlike that of any other manufacture.

THE HARMONIC CELESTE

Is a new and most valuable improvement, which brings into use an extra set of reeds, which, by their peculiar arrangement and method of tuning, produce a peculiarly beautiful, string quality of tone, with a most astonishing power, surpassing all the previous efforts of the inventor. This most admirable and surprisingly pleasing improvement, is now for the first time introduced in the Burdett organ, and cannot be used by any other manufacturer.

105 IMPROVED VOX HUMANA.

This most important of all improvements is the result of years of study and experiment by R. W. Carpenter, who is admitted to be one of our greatest musical inventors, and his vox humana, now used on the Burdett organ, is the perfection of genius. In solo passages its effects are entrancing; its pure, melodious, and sympathetic notes produce upon the listener a saddened pathos, which to all lovers of the beautiful in music is the perfection of intense passion, and when used with the "harmonic celeste," is, without exception, the most perfect combination in a reed-instrument that a musical ear ever listened to. It is the human voice mechanically personified.

THE CAMPANELLA.

This stop, the campanella, is the most beautiful and delicate of all Mr. Carpenter's many and valuable musical inventions, and, when used with taste, never fails to fascinate and entrance the hearer.

It should be used sparingly, and never introduced with a loud stop. The softer and more subdued the accompanying stop, the finer the effect produced. Occasionally using it without any wind or reed stop, like a chime of bells heard in the distance, and then bringing the whole power of the organ on in some old choral harmony, gives a fine effect. Quick music, waltzes, etc., can be played on this stop the same as on a piano, and with the same touch, thus adding great variety to the music usually produced on reed-organs.

LA PERFECTIONE.

Long experiment in the art of voicing reeds to produce an imitation of the dulciana stop in a pipe-organ has at last been successful, and Mr. Burdett, in the stop above captioned, has arrived at the tone so long sought but never found.

This stop is on the upper bank of the Burdett combination organ, and is one of the finest stops ever introduced in reed-organs. The
106 reed is peculiar, both in its shape and in the voicing, and being covered or encased by a tight-fitting swell-box, which is subject to the most complete control of the player without drawing a stop, is capable of producing softer, sweeter, and finer effects than even the far-famed dulciana. When used in combination with the vox humana the effect is entrancing. The ear revels in sweet sounds as they "fade and die" in the distance.

THE VIOLONCELLO.

This stop is on the upper bank of the Burdett combination organ, and is intended more particularly for a solo stop, being peculiarly adapted to carry a melody or air, the accompaniment being played on any suitable stop on the lower bank, at the caprice or taste of the player.

It adds great power to the full organ; should seldom or never be played with a full or four-fold chord, and never used alone for full harmonies below middle C; a duo or trio may be played, but as a solo it is most effective. In combination with the vox humana, using the celeste as an accompaniment, a true, soulful musician can produce most beautiful effects by a judicious use and timely introduction of this combination.

The la perfection stop, coupled with the violoncello, produce a perfect clarionet.

HALF-STOPS.

In the various styles of the Burdett organs, no half-stops or "cut-ups," as they are called, are allowed wherever it is possible to make a whole stop. This is exemplified in our style 7, which, in the Burdett organ, has only one stop, the "vox humana." Other manufacturers, in corresponding style, make a grand parade of five and sometimes even more draw-stops, cutting up each set of reeds into two or more stops, and giving them some high-sounding name, thus leading an unwary buyer to suppose that an instrument contains a great deal more than it really does.

107 THE COMBINATION-ORGAN,

As its name indicates, is an ingenious union of all our standard improvements, combined with many new features never before introduced or attempted in reed-organs, together making this organ the ne plus ultra of instruments, and one that has already created a revolution in the public mind in the decided favor of the general adoption of reed-organs, both for secular and sacred music, where an instrument is required either to accompany the voice, or to produce orchestral effects.

This instrument has six or more draw-stops, fancy solo-stops, and combinations being added at the desire of the purchaser, two banks of keys, pedal-bass which can be coupled to the manuals, two blow-pedals,

and contains all our patented improvements, including the "improved vox-humana," and "campanella."

This instrument is no more liable to get out of order than any of the other styles.

With the multitudinous and surprising combinations that are contained in this instrument, the most intricate music of the "great masters" can be rendered as on a grand organ; or the most simple music for the melodeon can be played by a child.

STOPS IN THE BURDETT ORGAN.

Styles 1 to 8 inclusive—one stop: vox humana.
9—two stops: Vox humana, sub-bass.
10—two stops: Vox humana, sub-bass.
11—three stops: Vox humana, sub-bass, harmonic.
12—three stops: Vox human', sub-bass, harmonic.
13—one stop: Vox humana.
14—one stop: Vox humana.
15—three stops: Vox humana, sub-bass, harmonic.
16—three stops: Vox humana, celeste, sub-bass.
17—three stops: Vox humana, celeste, sub-bass.
18—four stops: Vox humana, celeste.
Harmonic sub-bass.
19—eight stops: Bourdon bass, bourdon treble.
Diapason, vox humana.
Sub-bass, harmonic.
Flute, principal bass.
108 20—eight stops: Bourdon bass, bourdon treble.
Diapason, vox humana.
Pedal-check, harmonic.
Flute, principal bass.
21—twelve stops: Bourdon bass, bourdon treble.
Diapason, dulciana.
Flute, celeste.
Hautboy treble, hautboy bass.
Principal bass, vox humana.
Sub-bass, coupler.
22—twelve stops: Diapason, dulciana.
Bourdon bass, bourdon treble.
Flute, celeste.
Principal bass, hautboy bass.
Hautboy treble, coupler.
Vox humana, pedal-check.

N. B.—Other draw-stops and varieties of tone added at the option of the purchaser.

COMBINATION ORGANS.—These instruments are furnished with any required number of combination-stops at the fancy of the purchaser; but the standard styles are of three varieties, viz:

Style 29—six stops; Celeste, harmonic, man. sub-bass.
Vox humana, violoncello, cremorne-coupler.

☞ The diapason and cremorne stops being always open, no draw-stops for them being used, and the flute stop being drawn by the knee-swell. ☜

Style 30—eight stops; celeste, harmonic, sub-bass.
Vox humana, la perfectione, violoncello.
Flute, cremorne coupler.

☞ The diapason and cremorne stops being always open, no draw-stop for them being used, the flute stop and viononcello can be drawn by the knee-swell when desired. ☜

Style 31—eight stops; Celeste, harmonic, violoncello.
Vox humana, la perfectione.
Man. sub-bass, campanella.
Cremorne coupler, pedal bass.

☞ The "diapason" being always open, and the "flute" being drawn by the knee-swell. ☜

109 N. B.—The flute and violoncello stops in the two preceding varieties are coupled to the knee-swell, so that they can be brought on without removing the hand from the key-board to draw the stop, when so desired by the performer. This gives grand orchestral effects, explosives, diminuendoes, etc.

All the various improvements on the Burdett organ are protected by patent, belong exclusively to the company, and can be used on no other organ without an infringement of the rights of the several patentees. Do not be deceived by "make-believe" and subterfuge in those who represent that they have the same or similar improvements.

The several improvements hereinbefore described can be obtained only on the Burdett organ.

Allow no meddling with any reed-instrument without an actual necessity requires it. They are pieces of mechanism that, like a good watch, are best let alone. Many curious people, who know but little of mechanics, and less of a reed-organ, are but too anxious "just to take them apart," or "to see how they are made." "Hands off," except to play, is the best rule; and were it adopted by those owning a reed-instrument, there could be but little cause of complaint; and none that any careful and intelligent person could not remedy.

Do not have anything to do with traveling repairers, unless they come duly authenticated and recommended by some of the well-known manufacturers, or their agents.

No manufacturer or dealer can be expected to be held accountable for carelessness in the use of any instrument.

Should any fault be found, or any trouble not described herein, write at once to us, describing, as nearly as possible, what and where the same is, and we shall give prompt attention and a ready reply.

110 THE KNEE-SWELL.

In most of the Burdett organ the office of this appliance is two-fold. 1st. As a general swell. 2d. To bring into use a second set of reeds. When the knee-swell is moved gradually, it produces a crescendo till it finally brings into use the second or principal set of reeds. When moved suddenly, it produces an explosive orchestral effect, that no other swell is capable of doing. This improved knee-swell is found on none but the Burdett organ.

BLOWING.

In those of the Burdett organ, having two foot blow-pedals, each foot should be placed fully and squarely on the pedal. The feet should be made

to move up and down alternately—one pedal being made to descend, the other to ascend—allowing each ankle-joint to move freely, and making use of the ball of the heel of the foot as a fulcrum, and raising or depressing the toe as the action of the pedal may make it necessary The motion of the feet should be regular and uniform, and not with a short, quick, or jerky motion, and each pedal be made to move up or down to its full extent at each movement.

In no other way can the bellows be made to perform its legitimate duty, which is to cause a steady, constant, and regular supply of wind to pass through the reeds when required.

Many of the best players totally spoil the effect, and make nonsense of good music, when playing upon a reed-organ, simply from the want, either of a proper appreciation of the functions of an organ-bellows, or from a want of attention. Both of each wants—or failings—are equally culpable. The act of blowing is of the utmost importance in the mechanical operations of all reed-organs, and too much care and attention cannot be given to the proper use of the feet and the blow-pedals.

CONCLUSION.

We are prepared to exhibit numerous testimonials, fully endorsing ll we have said in regard to these truly wonderful instruments.

111 The Tremaine piano-fortes are acknowledged by all who have them in use, and by the first musical talent, to be equal, and in many respects, superior to any manufactured. They combine immense power, equality, sweetness, and brilliancy of tone, elasticity of touch, and great durability.

Dealers, teachers, and others desiring to purchase a first-class instrument, are invited to examine these pianos before making their selections elsewhere. All our instruments are manufactured with the patent agraffe treble, together with all modern improvements. The most thoroughly seasoned timber the market affords is selected, regardless of cost, as we feel assured it will be the cheapest in the end.

☞ Parties ordering by mail may rely on the best selections.

New and second-hand piano-fortes of various makers, at low prices for cash, or sold on instalments. Give us a call before purchasing.

☞ Every instrument of our own manufacture is fully warranted for six years.

Descriptive circulars sent to all parts of the country upon application.

C. M. TREMAINE & BRO.,
435 *Broome Street, New York.*

112 [CUT.]

Burdett combination organ, (with Carpenter & Burdett's new improvements.) The greatest success of the age. The reed-instrument perfected. We challenge the world to equal it, and cordially invite the profession, dealers, and the musical public generally to call and examine this truly wonderful instrument.

C. M. TREMAINE & BRO.,
435 *Broome St., near Broadway, New York, General Agents.*

Barnes & Martin, steam-printers, 18 Courtlandt st., N. Y.

113 *Price-list of the Burdett organs.*

ONE SET OF REEDS.

2 A. Five octaves, in paneled black-walnut case, oil and shellac finish, double blow-pedals, orchestral swell, carved trusses $140 00
2 B. Same as 3 A, with R. W. Carpenter's vox humana 165 00

NOTE.—The improved vox humana and campanella, invented by Dr. R. W. Carpenter, can be obtained only on the Burdett organs.

TWO SETS OF REEDS.

7 A. Five octaves, in paneled black-walnut case, oil and shellac finish, carved trusses, two blow-pedals, orchestral swell, three stops, viz, principal bass, flute, forte 170 00
7 B. Same as 7 A, with R. W. Carpenter's vox humana, four stops, viz, principal bass, flute, forte, vox humana 195 00
7 C. Same as 7 A, with vox humana and campanella, five stops, viz, principal bass, flute, forte, vox humana, campanella 235 00
9 A. Five octaves, in paneled black-walnut case, oil and shellac finish, carved trusses, two blow-pedals, orchestralswell, four stops, viz, flute, principal bass, forte, sub-bass 200 00
25 A. Five octaves, in paneled walnut case, oil and shellac finish, carved trusses, two blow-pedals, orchestral swell, &c., one stop, viz, celeste .. 175 00
25 B. Same as 25 A, with R. W. Carpenter's vox humana, two stops, viz, vox humana, celeste 200 00
25 C. Same as 25 A, with vox humana and campanella, three stops, viz, celeste, campanella, vox humana 240 00
26 A. Five octaves, paneled walnut case, oil and shellac finish, carved trusses, two blow-pedals, orchestral swell, &c., three stops, viz, celeste, flute, sub-bass 200 00
26 B. Same as 26 A, with R. W. Carpenter's vox humana, four stops, viz, celeste, flute, sub-bass, vox humana 225 00
26 C. Same as 26 A, with vox humana and campanella, five stops, viz, celeste, flute, sub-bass, vox humana, campanella 265 00

TREBLE CELESTE ORGANS.

16 A. Five octaves, paneled walnut case, oil and shellac finish, two blow-pedals, carved trusses, orchestral swell, &c., four stops, viz, flute, celeste, principal bass, sub-bass 225 00
16 B. Same as 16 A, with R. W. Carpenter's vox humana, five stops, viz, flute, celeste, principal bass, sub-bass, vox humana 250 00
18 A. Five octaves, paneled walnut case, oil and shellac finish, two blow-pedals, carved trusses, orchestral swell, &c., five stops, viz, flute, celeste, principal bass, sub-bass, harmonic 250 00
18 B. Same as 18 A, with R. W. Carpenter's vox humana, six stops, viz, flute, celeste, principal bass, sub-bass, harmonic, and vox humana 275 00
18 C. Same as 18 A, with vox humana and campanella, seven stops, viz, flute, celeste, principal bass, sub-bass, harmonic, campanella, and vox humana 315 00

☞ The several improvements hereinbefore described can be obtained only on the Burdett organ, manufactured at Chicago.

BURDETT PATENT COMBINATION-ORGAN.

29 A. One and a half banks of keys, six stops, violoncello, cremorne, harmonic, celeste, vox numana, and sub-bass 400 00
29 B. Same as 29 A, seven stops, with R. W. Carpenter's patent campanella ... 450 00
30 A. One and a half banks of keys, eight stops, la perfectione, harmonic, celeste, vox humana, sub-bass, cremorne, flute, violoncello, and diapason 425 00

Combination organ with pipe-top, pedal-bass, etc ..... $600 and upwards.

GRAND COMBINATION-ORGAN.

32. Two full banks keys, five octaves, F to F, or C to C, at option of purchaser, hand and foot blowers, twenty-seven notes pedal bass, paneled walnut

case, combination swell, carved trusses, oil and shellac finish, twelve stops, viz, la perfection, violoncello, bourdon, cremorne, coupler, principal bass, flute, celeste, harmonic, sub-bass, pedal-check, vox humana..... 650 00

This instrument is very powerful, and will fill a church seating fifteen hundred people. We are prepared to place it in competition with any $1,000 pipe-organ. We claim more power and a greater variety of combination.

Six-octave organs, also rosewood cases, made to order.

114 *Portable melodeons, combining all the best improvements.*

No. 2—5 octave, walnut case	$100 00
No. 3—6 octave, walnut case	115 00
No. 4—6 octave, rosewood case	125 00
No. 7—6 octave, rosewood, tremolo	135 00
No. 5—5 octave, rosewood case	110 00
No. 6—5 octave, rosewood, tremolo	120 00

Piano-case melodeons.—Octagon legs, elegant rosewood cases, three mouldings.

No. 8—5 octave	$150 00
No. 9—5 octave, tremolo	160 00
No. 15—6 octave, tremolo	190 00
No. 14—6 octave	180 00

Piano-case melodeons.—In splendid rosewood, round corners, three mouldings, carved legs, expressly adapted to the drawing-room.

No. 11—5 octave	$165 00
No. 12—5 octave, tremolo	175 00
No. 17—6 octave	200 00
No. 18—6 octave, tremolo	210 00

Double-reed, four stop, piano-style melodeons, highly finished.

No. 10—5 octave, octagon legs	$200 00
No. 13—5 octave, carved legs	210 00
No. 16—6 octave, octagon legs	240 00
No. 19—6 octave, carved legs	250 00

Gem organs.—In new style rosewood, walnut, and chestnut cases, single-reed, two blow-pedals and knee-swells, tremolo, sub-bass, castors, &c.

[CUT.]

No. 20—5 octave, chestnut case	$135 00
No. 21—5 octave, walnut case	135 00
No. 22—5 octave, rosewood case	160 00
No. 24—6 octave, walnut case	160 00
No. 63—6 octave, walnut, sub-bass	180 00
No. 62—5 octave, walnut, sub-bass	155 00
No. 61—5 octave, rosewood, sub-bass	180 00

Church and school organs.

In new style of walnut and chestnut cases, especially adapted to the home-circle, schools, lodges, and small churches. The price is reduced, to become available to every one. The great aim has been to manufac-

ture this instrument of perfect proportions to please the eye and satisfy the ear.

[CUT.]

No. 26—5 octave, double-reed, two stops	$180 00
No. 52—5 octave, three stops and manual, sub-bass	200 00
No. 53—5 octave, four stops, manual, sub-bass, and octave couple, by which we double the power of the instrument	225 00
No. 64—5 octave, four stops, sub-bass and coupler, with the improved music-desk and book-closet, with lock and key	240 00
Pedal-organs	$350 00 to 600 00

115 *Prices and description of the Eureka Leuto organs, in walnut and chestnut cases.*

[CUT.]

Style A—5 octave, single-scale, 2 stops	$135 00
" B—5 " double " 4 " improved music desk and closet	195 00
" C—5 octave, double-scale, 6 stops, octave-coupler, sub-bass, etc	250 00
" D—5 octave, single-scale, 4 stops, octave-coupler, sub-bass, etc	170 00
" E—5 octave, double-scale, 4 stops, sub-bass, improved music desk and closet	215 00
" F—6 octave, double-scale, 6 stops, sub-bass and coupler.	300 00

We have also organs in magnificent rosewood cases, highly ornamented, and expressly adapted for the parlor.

They have the improved music-desk and book-closets, with lock and key, the octave-coupler, vox humana, tremolo, etc.

Prices from $200 to $350.

Testimonials.

Below we give a few of the many testimonials we have received in regard to our organs:

The instrument manufactured by you for use in our concerts is a gem. It is the very best melodeon we ever had. Its qualities are good, and in every way perfect and complete.

GEORGE GALLOWAY,
Director "Alleghanians" Concert Troupe.

NEWTOWN, L. I., April 2, 1869.

The cabinet-organ used by our association is of the Tremaine Bros.' make, and we think its tone and power fully equal to the best.

JNO. P. PRALL,
Pres. Young Men's Christian Association.
A. RAPELYES, *Secretary.*

STAPLETON, STATEN ISLAND.

The organ gives the greatest satisfaction. We can see no reason why every society should not avail themselves of your most liberal terms.

With a hearty endorsement, and wish you every success, we are
Yours, very truly,

DR. JOHN L. FEENY, *W. P.*,
In behalf of Edgewater Division, Sons of Temperance.

FROM JAMES G. CLARK, THE POET VOCALIST.

UTICA, N. Y., *January* 15, 1869.

It is with the greatest pleasure that I recommend to my friends and the public the cabinet-organs now being offered to the musical world by C. M. Tremaine & Bro., of New York. I have tried the several styles of their instruments, and, in my opinion, they are equal, and in several improvements that have been made, superior, to any now being manufactured.

As a vocal accompaniment, I have found them better than any I have ever used, combining as they do sweetness and power of tone, together with an easy and quick action.

FLUSHING, L. I., *March* 29, 1869.

The cabinet-organ furnished by you for our lecture-room and for Sabbath-school use, and which was used at our late concerts, gives very great satisfaction, and I consider it second to none in tone, power, modulation, and durability, and in many respects, particularly in the arrangement of the swell, superior to other kinds which I have used.

I would recommend schools, and individuals requiring an organ, to give you a call before purchasing elsewhere.

Very truly, yours,

W. H. D. NIMMO,
Reformed Church Sabbath School.

Price-list of C. M. Tremaine & Bro's organs & melodeons, combining all their new and valuable improvements.

Warerooms, 435 Broome street, New York.

[CUT.]

The tone of these instruments is rich, powerful, and mellow.
The cases are pronounced by all who have seen them magnificent.
Every instrument warranted for six years.
Sold by .

116 This is to certify that we have appointed Messrs C. M. Tremaine & Bro., of the city of New York, our sole and only agents for the sale of the Burdett organs, in the following territory: The entire State of Connecticut; the city of New York, and so much of the State as lies east of and including Binghamton, on the Erie Railroad, and south of and including Newburgh, on the Hudson River; the city of Hudson, in the county of Columbia; the State of New Jersey, (except that part which lies contiguous to the city of Philadelphia,) and the town of Easton, in the State of Pensylvania.

(Signed) LYON & HEALY,
p. R. W. CARPENTER.

(Endorsed:) Exhibit G. J. G. JR.

117 (Endorsed:) U. S. circuit court. Alonzo Hitchcock et als. vs Charles M. Tremaine et als.

TESTIMONY, EVIDENCE, & EXHIBITS TAKEN BEFORE JOS. GUTMAN, JR., MASTER IN EQUITY.

Descriptive catalogue of the Burdett organs, containing R. W. Carpenter's improved vox humana, patented June 1st, 1867. [cut.] New York: C. M. Tremaine & Bro., 435 Broome street, 1870.

Price-list of the Burdett organs.

ONE SET OF REEDS.

		Price.
1.	Four octave, in paneled walnut case, with vox humana, 1 stop	$135
2.	Five octave, in paneled walnut case, " " 1 "	165
3.	The same, in elegant rosewood case, " " 1 "	200
4.	Six octave, in paneled walnut case, " " 1 "	190
5.	The same, in elegant rosewood case, " " 1 "	225

TWO SETS OF REEDS.

6.	Four octave, in paneled walnut case, with vox humana, 1 stop	165
7.	Five octave, in paneled walnut case, " " 1 "	195
8	The same, in elegant rosewood case " " 1 "	225
9.	Five octave, in paneled walnut case, with manual sub-bass and vox humana, 2 stops	225
10.	The same, in elegant rosewood case, 2 stops	255
11.	Five octave, with harmonic attachment and manual sub-bass and vox humana, 3 stops	250
12.	The same, in elegant rosewood case, with vox humana, 3 stops	275
13.	Six octave, in paneled walnut case, " " 1 "	240
14.	The same, in elegant rosewood case " " 1 "	270
15.	Six octave, in paneled walnut case, with harmonic attachment, manual sub-bass, and vox humana, 3 stops	285

THREE SETS OF REEDS.

19.	Five octave, with harmonic attachment, manual sub-bass, and vox humana, 8 stops	400
20.	The same, with 1½ octaves of pedal-bass instead of manual sub-bass, 8 stops	450

SIX SETS OF REEDS.

21.	Five octave, two keyboards, with manual sub-bass, harmonic, celeste, and vox humana, 12 stops	550
22.	The same, with 1½ octaves of pedal-bass instead of manual sub-bass	570

PATENT CELESTE ORGANS TREBLE CELESTE.

16.	Five octave, in paneled walnut case, with manual sub-bass, harmonic, celeste, and vox humana, 3 stops	$250
17.	The same, in elegant carved case, with vox humana, 3 stops	280
18.	Five octave, in paneled walnut case, with harmonic attachment, manual sub-bass, harmonic celeste, and vox humana, 4 stops	275
28.	The same, in elegant carved case	325

DOUBLE CELESTE.

23.	Six octave, two stops, vox humana, and harmonic celeste	225
24.	Six octave, four stops, vox humana, harmonic celeste, sub-bass, and harmonic attachment	325
25.	Five octave, two stops, vox humana, and harmonic celeste	200
26.	Five octave, four stops, vox humana, flute, sub-bass, and harmonic celeste	230
27.	Five octave, four stops, vox humana, harmonic celeste, sub-bass, and harmonic attachment	260

BURDETT PATENT COMBINATION-ORGANS.

29.	One and a half banks of keys, six stops, violoncello, cremorne, harmonic celeste, vox humana, and sub-bass	400
30.	One and a half banks of keys, eight stops, la perfectione, harmonic celeste, vox humana, sub-bass, cremorne, flute, violoncello, diapason	425

GRAND COMBINATION-ORGAN.

31. Eight stops, la perfectione, vox humana, sub-bass, harmonic celeste, cremorne, violencello, campanella, flute 475

☞ Grand combination organ with pipe-top, pedal-brass, etc., $600 and upwards.

* Styles 1 to 15, inclusive, are furnished, if required, without the improved vox humana, at $25 less than the printed prices.

118 Circuit court of the United States for the southern district of New York, in equity.

ALONZO HITCHCOCK, GEORGE G. SAXE, AND James H. Robertson
ag'st
CHARLES M. TREMAINE AND WILLIAM B. Tremaine.

To the honorable justices of the circuit court of the United States for the southern district of New York:

In pursuance of a decretal order made and entered in this cause, and bearing date the 23rd day of May, 1871, at a stated term of this court, by which it was referred to me, Joseph Gutman, jr., one of the masters of this court, to take and state the account of profits derived by the defendants from the infringement of the letters-patent issued on the 5th day of October, 1869, to the complainants, for a "tremolo-attachment" to musical instruments, I, Joseph Gutman, jr., the master so appointed, do respectfully report as follows:

I have been attended by the counsel for the respective parties and have heard the proofs and allegations adduced in either behalf,
119 and I do find and report that said defendants have been engaged in the purchase and sale, among other organs, of organs from the firm of Lyon & Healy, of Chicago, styled the Burdett organs, of various styles, numbered for distinction from No. 1 to 31, both inclusive, some of said organs being provided with the tremolo-attachment decreed to infringe said letters-patent, and others not.

That said defendants have purchased of said Lyon & Healy two hundred and seventeen (217) instruments, having therein and combined therewith said tremolo-attachments, as appears by the statement of said defendants hereto annexed, marked Exhibit No. 2.

That the retail price of said tremolo-attachments was in general twenty-five dollars, in addition to the price of the organ, and that the defendants purchased said organs and tremolo-attachments at a discount of fifty per cent. from the retail price, except in the case of styles 30 and 31; and that, according to said Exhibit 2, they derived as profits from the sale of said tremolo-attachments, over and above the profits arising from the sale of the organs containing said attachments, the sum of one thousand and fifty-six dollars and thirty-one cents.

That eighty of said two hundred and seventeen organs were of
120 the styles denominated styles 30 and 31 above-mentioned, which, with the tremolo-attachment, the defendants purchased at a discount of fifty per cent. on the retail price, less a deduction of fifty dollars first made on each instrument of such styles, making an average of one dollar and thirty-two cents on each of such eighty tremolo-attachments, less than the price stated for them in said Exhibit 2, and giving an amount of profits thus not accounted for in said Exhibit 2, of one hundred and five dollars and sixty cents.

That, in said Exhibit 2, the prices received for a number of organs with tremolo-attachments are erroneously stated, by reason of deduct-

ing the expenses of concerts from the profits of said particular organs, instead of charging them to the general expenses of the business, which expenses are not shown to have been greater by reason of the sale of the organ with the tremolo than without, while the profits of the defendants in each case of such sales were increased by the difference between the cost of the tremolo and the price for which sold.

Such profits, thus unaccounted for in said Exhibit 2, amount to the sum of twenty-three dollars and sixty-two cents; that the defendants also purchased organs or melodeons from the B. Shoninger Mel-
121 odeon Co. or B. Shoninger & Co., some having the tremolo-attachments decreed to infringe the said letters-patent, and others not.

That said defendants purchased of the said Shoninger Company twenty-two organs or melodeons, having therein and combined therewith said tremolo-attachment, as appears by the statement of said defendants hereto annexed, marked Exhibit 1, the retail prices of said attachments being ten dollars, in addition to the price of the instrument, and being purchased by the said defendants at a discount of from fifty to fifty-five per cent. from the retail price.

That, according to said statement, the said defendants derived as profits from the sale of said infringing tremolo-attachments, over and above the profits derived by them from the sale of the instruments containing said attachments, the sum of forty-seven dollars and ninety-five cents.

RECAPITULATION.

Amount of profits on Burdett organs, as per Exhibit 2.....	$1,056 31
Error in styles 30 and 31	105 60
Amount of error in Exhibit 2, as per books	23 62
Profits on Shoninger organs, as per Exhibit 1	47 95
	1,233 48

122 I do, therefore, respectfully report that the amount of profits derived by the defendants from the infringement of the said letters-patent is the sum of one thousand two hundred and thirty-three dollars and forty-eight cents.

I respectfully refer to Exhibits 1 and 2 hereto annexed as making a part of this, my report.

All which is respectfully submitted. Dated N. Y., July 6, 1871.

JOSEPH GUTMAN, JR.,
Master.

The defendants' counsel offered in various forms to prove the amount of expenses incurred by them in the purchase and sale of organs, for the purpose of charging a proportional part thereof upon the tremolo-attachment. This offer as made was overruled, the defendant' being allowed the right to prove and deduct, from the profits received by the sale of the tremolo, all expenses, if any, incurred by them in the purchase and sale of said tremolo-attachments over and above what would have been incurred by them in case they had purchased and sold the organs without the tremolos. The defendants did not offer any proof on this point. The defendants' counsel also offers to prove that the tremolo-attachments sold by the defendants contained three ele-
123 ments, with the view of proportioning the profits among these three elements. This offer was ruled out as going behind the decree.

124 Style.	No. of organs.	When bought.	Cost of organ.	Cost of tremolo.	Total cost.	When sold.	Net price received for organ.	Net price received for tremolo.	Total for organ & tremolo.	
		1869.				1869.				
4	20320	Sept. 30	$75	$5	$80	Oct. 11th	$117 80	$7 20	$125	Concert given.
5	20464	Oct. 18	$85	$5	$90	Nov. 29th	$118 50	$6 50	$125	
31	19304	March 31	$59 12½	$5	64 12½	Dec. 30th	$87 55	$7 45	$95 00	J. G. J.
						1870.				
21	2090	Ditto ditto	$59 12½	$5	$64 12½	Jan. 14	$59 12½	$5 00	$64 12½	Exchanged for advertising.
B	19283	March 29	$90 00	$5	$95	Jan. 14	$90 00	$5 00	$95 00	" "
52	19665	June 8	$90 00	$5	$95 00	Feb. 17	$144 95	$8 05	$153 00	
26	19472	May 6	$80 00	$5	$85 00	March 14	$169 40	$10 60	$180 00	Exchanged for piano.
26	19471	" "	$80 00	$5	$85	" 22	$80 00	$5 00	$85 00	" " advertising.
21	20903	June 15, '70	$59 12½	$5	$64 12½	" 23	$96 80	$8 20	$105 00	
D	19309	March 31, '69	$75 75	$5 00	$80 75	April 14	$138 90	$9 10	$148 00	On installments.
21	19311	" "	$59 12½	$5 00	$64 12½	May 12	$82 95	$7 05	$90 00	
26	21791	June 8, '70	$65 00	$5 00	$70 00	June 10	$88 20	$6 80	$95 00	Concert, $75.
Dit'o	21792	" "	$65 00	$5 00	$70 00	" 23	$116 05	$9 95	$126 00	Concert given, $50.
C	19292	March 30, '69	$113 75	$5 00	$118 75	July 22	$131 40	$5 80	$137 50	
5 "	22175	Aug. 1, '70	$71 00	$5 00	$76 00	Aug. 2nd	$79 40	$5 60	$85 00	
7 "	19234	March 13, '69	$144 63	$5 00	$149 63	" 19th	$244 50	$8 50	$253 00	On installments.
21	21790	June 7, '70	$59 12½	$5 00	$64 12½	Oct. 1, '70	$64 50	$5 50	$70 00	
H	19519	May 13, '69	$120 88	$5 00	$125 88	" "	$134 40	$5 60	$140 00	
21	21351	April 4, '70	$59 12½	$5 00	$64 12½	" 8th	$96 80	$8 20	$105 00	
21	22016	Nov. 7, '70	$59 12½	$5 00	$64 12½	Nov. 9th	$124 45	$10 55	$135 00	On installments.
						1871.				
21	22907	Nov. 21, '70	$59 12½	$5 00	$64 12½	Feb. 27	$73 75	$6 25	$80 00	
21	21350	April 4, '70	$59 12½	$5 00	$64 12½	March 3	$71 45	$6 05	$77 50	
				$110 00				$157 95		
								110		
								$47 95		

125 John M. Tremaine, being duly sworn, says he is book keeper for the defendants, Charles M. Tremaine and William B. Tremaine; that he has kept the account of this purchase and sales of all the instruments dealt in by the said defendants during the past two years, and that the annexed or foregoing statement is a true account of all the purchases and sales of Shoninger organs with tremolo-attachments made by defendants since the 5th day of October, 1869; that the amount paid for the tremolo-attachments upon the 22 organs therein specified was one hundred and ten dollars, and that the amount received was only one hundred and fifty-seven dollars and ninety-five cents; that the gross profits, without deducting any part of the expenses of the business, was only forty-seven dollars and ninety-five cents upon all the Shoninger tremolo sold in that time.

(Endorsed:) Exhibit 1. Statement of profits on Shoninger organ tremolo.

126 Style.	No. of organs.	When bought.	Cost of organ.	Cost of tremolo.	Total cost.	When sold.	Price rec. for organ.	Price rec. for tremolo.	Total.	
		1869.				1869.				
30	14975	Oct. 5	175 00	12 50	187 50	Oct. 21	163 54	19 80	283 34	
31		" 16	200	12 50	212 50	" 27	230 64	14 36	245 00	
26	14540	" 16	100	12 50	112 50	Nov. 4	173 75	21 75	195 50	
31	14545	" 19		12 50						Organ returned.
29	14298	Aug. 17	162 50	12 50	175 00	" 9	241 38	18 62	260 00	
26	14054	June 5	100	12 50	112 50	" 9	132 84	16 66	149 50	
26	14539	Oct. 16	100	12 50	112 50	" 9	173 78	21 62	195 40	
30	14565	" 26	175	12 60	187 50	" 11	258 00	18 25	276 25	
30	14580	" 28	175	12 50	187 50	" 22	258 00	18 25	276 25	Sold South, no profit.
18	14525	" 13	125	12 50	137 50	" 25	181 62	18 38	200 00	2 concerts given, $75.
2	14520	" 12	70	12 50	82 50	" 29	91 12	16 38	107 50	Discount $57.50.
7	14259	July 13	85	12 50	97 50	" 30	110 50	16 25	126 75	
31	14602	Nov. 9	200	12 50	212 50	Dec. 1	279 00	15 50	294 50	
30	14620		175	12 50	187 50	" 1	248 00	15 50	263 50	
25	14604	" 4	87 50	12 50	100 00	" 1	108 50	15 50	124 00	
31	14491	Oct. 7	200	12 50	212 50	" 3	292 50	16 25	308 75	Sold South, no profit.
31	14545	" 19	200	12 50	212 50	" 3	292 50	16 25	308 75	" " "
7	14291	Aug. 14	85	12 50	97 50					Organ returned.
2	13063									" "
26	14684	Nov. 27	100	12 50	112 50	Dec. 18	133 25	16 25	149 50	
31	14682	" 26	200	12 50	212 50	" 20	200 00	12 50	212 50	Advertising.
26	14686	" 27	100	12 50	112 50	" 20	100 00	12 50	112 50	"
26	14691	" 30	100	12 50	112 50	" 23	127 60	15 00	142 60	
30	14596	Nov. 4	175	12 50	187 50	" 24	175 00	12 50	187 50	"
31	14601	" 6	200	12 50	212 50	" 17	292 50	16 25	308 75	Sold South, no profit.
31	14731	Dec. 14	200	12 50	212 50	" 29	292 50	16 25	308 75	" " "
31	14597	Nov. 6	200	12 50	212 50	" 18	292 50	16 25	308 75	" " "
127 30	14517	Oct. 12	175	12 50	187 50	Dec. 18	175 00	16 50	191 50	Sold South, no profits.
30	14461	Sept. 25	175	12 50	187 50	" 30	353 13	21 87	375 00	Concert given, $50.
26	14732	Dec. 15	100	12 50	112 50	" 30	133 25	16 25	149 50	
30	14731	" 14	175	12 50	187 50	" 30	175 00	16 50	191 50	Sold South, no profit.
25	14687	Nov. 27	87 50	12 50	100	" 31	131 25	18 75	150 00	
18	14698	Dec. 3		12 50		" 31				Organs returned May 5, '70.
30	14536	Oct. 26		12 50		" 6				" " 1.32.
						1870.				
30	14750	Dec. 30	175 00	12 50	187 50	Jan. 8	248 00	15 50	263 50	1.32.
18	14020	June 2	150 00	12 50	162 50	" 14	277 50	12 50	290	Advertising.

Style.	No. of organs.	When bought.	Cost of organ.	Cost of tremolo.	Total cost.	When sold.	Price rec. for organ.	Price rec. for tremolo.	Total.	
30	14782	Jan. 7, '70	175 00	12 50	187 50	" 20	317 88	22 12	340	1.32.
18	14699	Dec. 3	125 00	12 50	137 50	Feb. 5	162 50	16 25	178 75	
18	14724	" 10	125 00	12 50	137 50	" 12	200 00	20 00	220	
30	14375	Sept. 8	175 00	12 50	187 50	" 24	290 62	20 63	311 25	Concert given, $50. 1.32.
30	14695	Dec. 1	175 00	12 50	187 50	" 25	400 00	25 00	425	On installments. 1.32.
31	14860	Feb. 7, '70	200 00	12 50	212 50	March 2	315 00	17 50	332 50	1.32.
31	14852	" 1, '70	200 00	12 50	212 50	" 15	382 50	21 50	403 75	1.32.
30	14894	" 19	175 00	12 50	187 50	" 15	260 00	16 25	276 25	Commission paid, $48.75.
18	14702	Dec. 4, '69	125 00	12 50	137 50	" 22	153 67	15 25	168 92	
30	14899	Feb. 18, '70		12 50		" 26			600	Sold South, no profit.
11	14290	Aug. 13, '69	112 50	12 50	125	" 26	143 88	10	153 88	" "
31	14141	June 26, '69	200 00	12 50	212 50	" 26		16 25	425	" "
18	14723	Dec. 10, '69	112 50	12 50	125 00	" 26		16 25	275	" "
30	14713	" 7, '69				" 26		16 25	421	" "
30	14715	" 7, '69				" 26		16 25	325	" "
18	14737	" 15				" 26		16 25	306	" "
26	14690	Nov. 30				" 26		16 25	200	" "
31	14813	Jan. 12, '70				" 26		16 25	475	" "
128 31	13814	Jan. 15, '70				March 26		16 25	291 78	Sold South, no profit.
30	14694	Nov. 30, '69				" 26		16 25	276 25	" " "
18	14736	Dec. 15, '69				" 26		16 25	275	" " "
18	14699	" 3, '69				" 26		16 25	309 50	" " "
26	14772	" 31, '69	125	12 50	137 50	" 30	204 50	20 50	225	Stool given.
2	14774		70	12 50	82 50	" 30	99 75	17 25	113	
25	14777	" 31, '69	87 50	12 50	100	April 8	148 75	21 25	170	
30	15007	March 29, '70	262 50	12 50	275	" 14	325 50	15 50	341	
2	14753	Dec. 22, '69	70	12 50	82 50	" 14	70 00	12 50	82 50	Advertising.
30	15033	April 5, '70	175	12 50	187 50	" 16	300	18 75	318 75	
26	14812	Jan. 12	100	12 50	112 50	" 23	149 75	18 25	168	
31	14844	" 29	287 50	12 50	300 00	" 25	402 50	17 50	420	
26	14685	Nov. 27, '69	100	12 50	112 50	" 29	160 00	20 00	180	Concert given, $50.
18	14698	Dec. 3, '69	125	12 50	137 50	May 5	204 50	20 50	225	" " "
18	14701	" 3, '69	125	12 50	137 50	" 9	162 50	16 25	178 75	
30	14565	Oct. 26, '69	175	12 50	187 50	" 10	260 00	16 25	276 25	35 % to Orlando.
26	15039	April 7, '70	125	12 50	137 50	" 13	180 00	20 00	200	
26	14887	Feb. 15	100	12 50	112 50	" 17	100 00	12 50	112 50	Advertising.
31	14854	" 3	200	12 50	212 50	" 20	306 07	18 93	325	
26	14734		125	12 50	137 50	" 21	180 14	20 30	200 44	37½ % discount.
26	14806	Jan. 12	100	12 50	112 50	" 21	126 85	15 75	142 60	

11		15165	May	12		112	50	12	50	125		21		216		24	00	240	
30		14536	Oct.	26, '69		175		12	50	187	50	26		256	63	18	37	275	
26		14886	Feb.	15, '70		100		12	50	112	50	31		100		12	50	112	50	Advertising.
30		14818	Jan.	24		225		12	00	250	00	June	6	308	75	16	25	325		Baptist Church, 12th street.
31		15128	May	3		200		12	00	212	50	"	9	353	06	22		375		
30		15011	March	30		175		12	50	187	50	"	10	300	50	18	25	318	75	
2		15248	May	30		175		12	50	187	50	"	15	127	38	22	68	150		
129	30	14757				175	00	12	50	187	50	June	15	260	50	16	25	276	75	Sold by Orlando.
	30	15276	June	9		175	00	12	50	187	50	June	15	268	88	21	12	290	00	Concert given.
30		14881				175	00	12	50	187	50	July	6	257	13	19	12	276	25	Concert & commission given.
7		14839	Jan.	27		85	00	12	50	97	50	July	13	148	25	21	75	170	00	
26		15291	June	11		125	00	12	50	137	50	July	23	158	10	15	50	173	60	
31		15408	July	14		210	00	12	50	222	50	July	25	377	50	22	50	400	00	
7		15230				85	00	12	50	97	50	July	27	152	63	22	37	175	00	
26		15297	June	11		100	00	12	50	112	50	Aug.	10	141	00	20	00	161	00	
31		15505	Aug.	4		200	00	12	50	212	50	Aug.	13	300	00	16	67	316	67	
26		15296	June	11		100	00	12	50	112	50	Aug.	13	130	38	19	12	149	50	
26		14807	Jan.	12		100	00	12	50	112	50	Aug.	18	130	38	19	12	149	50	
18		14735	Dec.	15, '69		125	00	12	50	137	50	Aug.	18	160	88	17	87	178	75	
26		14811	Jan.	12		100	00	12	50	112	50	Aug.	24	141	00	20	00	161	00	
31		15506	Aug.	4		200	00	12	50	212	50			291	13	17	62	308	75	
30		15276	June	9		175	00	12	50	187	50	Sept.	2	277	63	19	87	297	50	
31		15167				2 4	00	12	50	212	50	Sept.	10	312	88	19	62	332	50	
26		15291	June	11		125	00	12	00	137	50	Sept.	19	165	75	16	25	182	00	
18		15405	July	11		125	00	12	50	137	50	Sept.	30	150	00	15	00	165	00	
9		14223				100	00	12	50	112	50	Oct.	1	130	00	16	25	146	25	
31		15447	July	27		200	00	12	50	212	50	Oct.	1	254	25	15	63	269	88	
26		15663	Sept.	13		100	00	12	56	112	50	Oct.	5	184	50	22	50	207	00	
31		15689				200	00	12	50	212	50	Oct.	7	291	13	17	62	308	75	
18		15670	Sept.	13		125	00	12	50	137	50	Oct.	8	163	66	16	37	180	00	
26		15278	June	9		100	00	12	50	112	50	Oct.	10	165	75	16	25	182	00	
26		15292	June	11		100	00	12	50	112	50	Oct.	10	165	75	16	25	182	00	
26		15662	Sept.	13		100	00	11	50	112	50	Oct.	11	133	35	16	25	149	50	
26		14722	Dec.	10, '69		137	50	12	50	150	00	Oct.	12	229	13	20	87	250	00	
	30	14696	Dec.	3, 69		137	50	12	50	275	00	Oct.	17	385	25	16	75	402	00	
130	30	15750	Oct.	11		175	00	12	50	187	50	Oct.	17	239	54	15	00	254	54	
	31	15749	"	8		200	00	12	50	212	50	"	17	270	00	15	00	285	00	
9		15751	"	15		100	00	12	50	112	50	"	17	120	00	15	00	135	00	
26		15656	Sept.	13		100	00	12	55	112	50	"	20	133	25	16	25	149	50	
30		15350	June	23		175	00	12	50	187	50	"	21	337	50	18	75	356	25	G. C. Adams.
30		15501	Aug.	3		175	00	12	50	187	50	"	26	260	00	16	25	276	25	
18		15499				125	00	12	50	137	50	"	29	162	50	16	25	178	75	
18		15802	Oct.	21		125	00	12	50	137	50	Nov.	2	162	50	16	25	178	75	H. P. Main.
9		15253	June	1		109	00	12	50	112	50	"	5	130	00	16	25	146	25	
9		15254	"	2		100	00	12	50	112	50	"	5	130	00	16	25	146	25	
25		14850	Feb.	1		87	50	12	50	100	00	"	5	113	75	16	25	130	00	
2		15705	Sept.	24		70	00	12	50	82	50	"	8	91	00	16	25	107	25	
18		15801	Oct.	21		125	00	12	50	137	50	"	9	162	50	16	25	178	75	
31		14904	Feb.	23		287	50	12	50	300	00	"	9	373	75	16	25	390	00	
30		15564	Aug.	25		287	50	12	50	300	00	"	12	573	75	16	25	390	00	
30		15191	May	18		175	00	12	50	187	50	"	22	260	00	16	25	276	25	
26		14673	Dec.	6, '69		137	50	12	50	150	00	"	22	178	75	16	25	195	00	

	Style.	No. of organs.	When bought.	Cost of organ.	Cost of tremolo.	Total cost.	When sold.	Price rec. for organ.	Price rec. for tremolo.	Total.	
26		14055	June 5, '69	100 00	12 50	112 50	" 23	136 69	16 25	153 34	
26		15664	Sept. 13	100 00	12 50	112 50	" 23	136 35	16 65	153 00	
18		15800	Oct. 21	125 00	12 50	137 50	" 17	227 25	22 75	259 00	
26		15292	June 11	125 00	12 50	137 50	" 25	165 75	16 25	182 00	Sold to Tremaine Bros. & Pierson.
18		15936	Nov. 13	125 00	12 50	137 50	" 30	262 50	16 25	174 28	
30		15010	March 29	175 00	12 50	187 50	" 30	260 00	16 25	276 25	
2		15855		70 00	12 50	82 50	Dec. 2	112 13	19 87	132 00	Haskell, Dec. 6, '69.
18		15860	Nov. 4	125 00	12 50	137 50	" 6	162 50	16 25	178 75	
31		15407	July 11	200 00	12 50	212 50	" 8	414 13	25 87	440 00	
18		15937	Nov. 13	145 00	12 50	157 50	" 12	211 70	18 25	229 95	
	30	14490	Oct. 5, '69	175 00	12 50	187 50	" 12	260 00	16 25	276 25	
131	31	15448	July 27	200 00	12 50	212 50	Feb. 14	292 50	16 25	308 75	
	26	15975	Nov. 29	100 00	12 50	112 50	" 14	130 25	16 25	146 50	
26		15887	" 12	100 00	12 50	112 50	" 17	130 25	16 25	146 25	
18		16025	Dec. 12	137 50	12 50	150 00	" 27	178 75	16 25	195 00	
9		15914		100 00	12 50	112 50	" 27	130 00	16 25	146 25	
B		16191	Jan. 30, '71	71 50	12 50	84 00	" 27	89 38	15 62	105 00	
26		17377	Feb. 24, '71	100 00	12 50	112 50	March 8	124 00	15 50	139 50	
"		17329	" 24, '71	137 50	12 50	150 00	" 14	178 75	16 25	195 00	
B		17332	Jan. 27, '71	71 50	12 50	84 00	" 14	92 95	16 25	109 20	
B		17288		71 50	12 50	84 00	" 14	92 95	16 25	109 20	
26		14808	Jan. 12, '71	100 00	12 50	112 50	" 17	130 00	16 25	146 25	
"		15656	Sept. 13	100 00	12 50	112 50	" 20	137 00	16	153 00	
9		15915	Nov. 17	100 00	12 50	112 50	" 20	130 00	16 25	146 25	
9		17276	Feb. 13, '71	100 00	12 50	112 50	" 20	133 25	16 75	150 00	Tremaine Bros. & Pierson.
30		16175	Jan. 12, '71	175 00	12 50	187 50	" 22	251 25	16 25	267 50	
30		16179	Jan. 12	175 00	12 50	187 50	" 23	260 00	16 25	276 25	
25		14851	Feb. 1	87 50	12 50	100 00	" 23	113 75	16 25	130 00	
26				100 00	12 50	112 50	" 24	112 00	20 00	132 00	
18		17231	Jan. 27	140 00	12 50	152 50	" 25	162 50	16 25	178 75	
B		17439		71 50	12 50	84 00	" 29	89 38	15 62	105 00	
30		16106	Dec. 30, '70	387 50	12 50	400 00	April 1	484 38	15 62	500 00	
18		16012	Dec. 8	140 00	12 50	152 50	" 3	165 75	14 75	184 50	
26		17445	March 18, '71	100 00	12 50	112 50	" 5	124 00	15 50	139 50	
30		16055	Dec. 19	287 50	12 50	300 00	" 10	373 75	16 25	390 00	
1		15538		1,087 50	12 50	1,100 00	" 11	1,285 25	14 75	1,300 00	
B		17522	April 4, '71	96 50	12 50	109 00	" 12	121 75	15 75	137 50	
	7	17500	March 29, '71	85 00	12 50	97 50	" 13	110 50	16 25	126 75	
132	26	15976	Nov. 29	100 00	12 50	112 50	Dec. 15	133 25	16 25	149 50	

26	15939	Dec.	1	100 00	12 50	112 50	"	15	133 25	16 25	149 50	
26	15995			125 00	12 50	137 50	"	16	161 70	19 75	177 45	1.32.
30	14938	March	3	175 00	12 50	187 50	"	19	260 00	16 25	276 25	1.32.
31	15832	Oct.	29	200 00	12 50	212 50	"	20	292 50	16 25	303 75	
18	15971			140 00	12 50	152 50	"	22	172 60	16 50	189 10	
26	15990	Nov.	30	100 00	12 50	112 50	"	22	127 00	15 50	142 60	
18	15913	Nov.	17	125 00	12 50	137 50	"	23	162 50	16 25	178 75	
25	15923	Dec.	15	87 50	12 50	100 00	"	27	113 75	16 25	131 00	
25	15925	"	15	87 50	12 50	100 00	"	27	113 75	16 25	130 00	
26	16056	"	17	125 00	12 50	137 50	"	28	165 75	16 25	182 00	
							1871.					
25	15984	"	15	87 50	12 50	100 00	Jan.	5	113 75	16 25	130 00	
7	14805	Jan.	12	85 00	12 50	197 50	"	10	109 06	15 94	125 00	Concert given for balance.
26	16057	Dec.	22	100 00	12 50	112 50	"	11	133 25	16 25	149 50	
18	15983	"	2	140 00	12 50	152 50	"	12	182 00	16 25	198 25	
18	15862	Nov.	4	125 00	12 50	137 50	"	14	175 00	17 50	192 50	
30	15192	May	19	175 00	12 50	187 50	"	24	260 00	16 25	276 25	1.32.
18	16013	Dec.	9	140 00	12 50	152 50	"	26	172 60	16 50	189 10	
30	16177	Jan.	12	175 00	12 50	187 50	"	28	260 00	16 25	276 25	1.32.
7	14277	Aug.	10, '69	85 00	12 50	97 50	"	28	130 63	19 37	150 00	$45 discount.
26	15888	Nov.	12	100 00	12 50	112 50	Feb.	1	133 35	16 25	149 50	
31	16098	Dec.	27	237 50	12 50	250 00	"	6	303 75	16 25	320 00	Exchange for piano.
7	14291	Aug.	14, '69	85 00	12 50	97 50	"	8	110 50	16 25	126 25	
18	15863	Nov.	4	100 00	12 50	137 50	"	10	162 50	16 25	178 75	
26	16054	Dec.	17	100 00	12 50	112 50	"	10	124 00	15 50	139 50	
26	16055	Dec.	19	100 00	12 50	112 50	"	10	124 00	15 50	139 50	
31	17240	Jan.	30, '71	200 00	12 50	212 50	"	13	292 50	16 25	308 75	
133 26	17515	April	3, '71	100 00	12 50	112 50	April	13	130 00	16 25	146 25	
18	17237	Jan.	27	140 00	12 50	152 50	"	13	162 50	16 25	178 75	
31	17274	Feb.	9	200 00	12 50	212 80	"	13	292 50	16 25	308 75	
B	17440	March	16	71 50	12 50	84 00	"	14	89 38	15 62	105 00	
B	17441	"	16	71 50	12 50	84 00	"	14	106 38	18 62	125 00	
31	14729	Dec.	13, '69	287 50	12 50	300 00	"	15	311 60	13 50	325 00	
26	14054	June	5, '69		12 50		"	15				Sold Nov. 9, '69, and returned.
26	17514	April	3, '71	100 00	12 50	112 50	"	20	177 75	22 25	200 00	
31	17256	Feb.	2, '71	200 00	12 50	212 50	"	20	292 50	16 25	308 75	
B	17523	April	7	96 50	12 50	109 00	"	21	121 75	15 75	137 50	
B	17524	"	6	96 50	12 50	109 00	"	21	121 75	15 75	137 50	
30	16178	Jan.	12	175 00	12 50	187 50	"	25	260 10	16 25	267 25	
26	17554	April	13	125 00	12 50	137 50	"	26	159 50	16 00	175 10	
B	17531	"	13	96 50	12 50	109 00	"	17	115 25	15 75	131 00	
B	17577	"	17	96 50	12 50	109 00	"	28	121 75	15 75	137 50	
B	17576	"	18	96 50	12 50	109 00	"	29	121 75	15 75	137 50	
B	17575	"	19	96 50	12 50	109 00	"	29	121 75	15 75	137 50	
B	17580	"	19	96 50	12 50	109 00	"	29	121 75	15 75	137 50	
26	17412	March	18	100 00	12 50	112 50	May	2	133 33	16 67	150 00	
B	17540	April	12	130 00	12 50	142 50	"	2	159 00	16 25	185 25	
26	17596	"	19	100 00	12 50	112 50	"	2	130 00	16 25	146 25	
B				71 50	12 50	84 00	"	2	85 00	15 00	100 00	
B	17606	April	22	71 50	12 50	84 00	"	3	85 00	15 75	100 00	
18	17546	"	12	125 00	12 50	137 50	"	5	162 50	16 25	178 75	

Style.	No. of organs.	When bought.	Cost of organ.	Cost of tremolo.	Total cost.	When sold.	Price rec. for organ.	Price rec. for tremolo.	Total.	
30	17609	" 25	175 00	12 50	187 50	" 5	175 00	16 25	178 75	Paid in advertising.
B	17641	May 4th	96 50	12 50	109 00	" 13	121 75	15 75	137 50	
B	17642	" "	96 50	12 50	109 00	" 13	121 75	15 75	137 50	
B	15911	Nov. 29, '70	96 50	12 50	109 00	" 16	123 88	15 75	140 00	
134 26	17597	April 17, '71	100 00	12 50	112 50	May 17	130 00	16 25	146 25	
B	17608	" 22	71 50	12 50	84 00	" 18	84 25	15 75	100 00	
B	17526	May 4	96 50	12 50	109 00	" "	118 25	15 75	134 00	
26	17633	" 1, '71	100 00	12 50	112 50	" "	177 75	22 25	200 00	
31	17255	Feb. 2	200 00	12 50	212 50	" "	281 26	15 62	296 88	
18	17547	April 12, '71	125 00	12 50	137 50	" "	150 00	15 00	165 00	
				$2,750				$3,756 31	$51,087 18	
				$2,700 or				2,700 00		
								1,056 31		

(Endorsed:) C. C. U. S. S. D. N. Y. Alonzo Hitchcock, George G. Saxe, and James H. Robertson ag'st Charles M. Tremaine and William B. Tremaine. Master's report on accounting of profits. Filed July 8, 1871.

135 Circuit court of the United States, southern district of New York.

ALONZO HITCHCOCK, GEORGE G. SAXE, AND James H. Robertson
vs.
CHARLES M. TREMAINE AND WILLIAM B. TREmaine.
} In equity.

Exceptions taken by Charles M. Tremaine and William B. Tremaine, the defendants in the bill of complaint named, to the report of Joseph Gutman, jr., esq., one of the masters of this court to whom it was referred by a decretal order made and entered in this cause, bearing date the 23rd day of May, 1871, to take and state the account of profits derived by the defendants from the infringing of the letters-patent issued on the 5th day of October, 1869, to the complainants for a tremolo-attachment to musical instruments, which report is dated the 6th day of July, 1871.

FIRST EXCEPTION.—For that said master hath, in and by his said report, certified that the difference between the actual price paid by the defendants to the manufacturer for the whole tremolo-attachments and the price for which they were delivered by the defendants to their customers, or, in all, the sum of one thousand two hundred and
136 thirty-three dollars and forty-eight cents, should be charged to the defendants as the amount of profits derived by them from the sale of said tremolo-attachments, and refused to allow the defendants to prove and deduct from said gross amount a portion of the expenses of their business proportioned upon the relation which the total sales of tremolo-attachments bore to the total sales of instruments; whereas said master ought to have allowed such proof and made said deduction.

SECOND EXCEPTION.—For that said master hath in and by his said report certified that the whole amount of profits which the defendants have derived from the sale of the whole tremolo-attachment should be charged to the defendants as the amount of profits they have derived from the infringing of the said letters-patent of the complainants; and refused to allow the defendants to prove that each tremolo-attachment, upon the sales of which the master has certified the profits, contained two other and distinct patented devices besides the device adjudged to infringe upon said letters-patent of the complainants; whereas said master ought to have allowed such proof to be made, and to have certified that only a portion of the profits derived from
137 the sale of the tremolo-attachments was due to the device which was adjudged to infringe upon the complainants' patent.

B. E. VALENTINE,
Defendants' Solicitor.

Dated August 4th, 1871.

(Endorsed:) U. S. circuit court southern dist. of N. Y. Alonzo Hitchcock et al. vs. Charles M. Tremaine et al. Exception to master's report. Filed Aug. 5th, 1871. B. E. Valentine, def't' sol'r, 26 Court st., Brooklyn.

138 Circuit court of the United States, southern district of New York.

ALONZO HITCHCOCK ET AL.
vs.
CHARLES M. TREMAINE ET AL.

SIR: Take notice that we shall apply to his honor Judge Woodruff, at his residence, No. 10 west 29th st., in the city of New York, on Friday, February 23rd, at 9 a. m., for a settlement of the order referring this cause back to the master for further proofs in accordance with the opinion filed February 1st, 1872.

Yours, &c.,

MATTHEWS & BETTS,
Compl'ts' Sol'r.

To B. E. VALENTINE,
Def'ts' Sol'r.

(Endorsed:) U. S. circuit court S. D. of New York. Alonzo Hitchcock et al. vs. Charles M. Tremaine et al. Notice end. D. E. N.

139 Due service of within notice is hereby admitted.
NEW YORK, *Feb'y* 21, 1872.
Filed Feb'y 28, 1872.

140 At a circuit court of the United States held in and for the second circuit and southern district of New York, at the court-house, in the city of New York, on the 28th day of February, 1872.

Present, Hon. Lewis B. Woodruff, court judge.

ALONZO HITCHCOCK ET AL.
vs.
CHARLES M. TREMAINE ET AL.

This cause having come on to be heard on the master's reports of the profits derived by the defendants from infringement of the complainants' patent for a tremolo-attachment for musical instruments, mentioned in the bill of complaint, and upon exceptions thereto after the hearing of counsel thereon, it is ordered that the report be sent back to the said master to take further proofs as directed herein.

It is further ordered that the first exception to said report be
141 allowed so far as to permit the defendants to prove the general expenses of their business incurred alike to effect the sale of all goods, i. e., not specifically incurred in reference to any particular class or kind, said general expenses to be apportioned by the master, and a part of the same, bearing the same proportion to the whole that the gross sum received from sales of the infringement bears to the gross sum received by the defendants from all sales in their said business, to be added to the expense of the infringing tremolos, and allowed to the defendants.

It is further ordered that said second exception be allowed so far as to permit the defendants to show, if they are able, that they received an enhanced price for their infringing attachments by reason of its connection with the peculiar mode adopted by them of producing or regulating the motion, so that the profits or difference between the cost and

the price of sale was enhanced thereby, unless the defendants
142 can show that the peculiar apparatus by which, in the instruments they sold, the motion of the tremolo was imparted or regulated gave them an increased price not due to the patented improvement however moved or adopted use' then the cost of such apparatus alone is to be considered, as was done by the master in stating the accounts, and if upon the proof it be found that the price realized from the attachment is due to the patented device for causing the vibration of the air, as described in and claimed by the specification of the complainants' patent, irrespective of any peculiarity in the mode of producing the motion thereof, then the profits are to be inspected to the complainants' patented device, and to be allowed them, as was done by the master.

It is further ordered that the exceptions to the said report be in all other respects overruled, and that the said master proceed to take proofs as directed, and that he report thereon, without costs to
143 either party, on the exceptions.

(Sig'd) L. B. WOODRUFF, *Circ't Judge.*

(Endorsed:) Alonzo Hitchcock et al. vs. Charles M. Tremaine et al. Order of reference back to master. Filed Feb'y 28, 1872.

144 Circuit court of the United States, southern district of New York.—In equity.

ALONZO HITCHCOCK ET AL.
vs.
CHARLES M. TREMAINE.

Further proofs taken before Joseph Gutman, jr., master on final accounting in the above cause, pursuant to order of February 28, 1872, sending back report, &c.

N. Y., MARCH 7, 1872, 2 p. m.—Present, counsel for the respective parties.

Hearing adjourned by consent to March 11th, 1872.

JOSEPH GUTMAN, JR.,
Master.

N. Y., MARCH 11, 1872.

Present, counsel for respective parties.

JOHN M. TREMAINE, sworn as a witness on part of respond-
145 ents, and examined by Mr. Valentine, counsel for defendants, deposes and says:

I am book-keeper for the defendants in this action; have been such during the whole term of their business up to within the last month or so, and during the whole period embraced in the statement of account now produced by me.

(Statement offered in evidence, objected to by complainants' counsel, and marked Exhibit A.)

From Oct. 6, 1869, to June 1, 1871, the whole amount of receipts from sales of organs and pianos, and all goods in the business of the defendants, was how much?

(Objected to unless witness has personal knowledge outside of the books, or unless the books are here present. If his knowledge is derived solely from his knowledge of the contents of the books, counsel

objected to his testifying as to his knowledge without the production of the books.)

146 (Question ruled out unless books are produced so that complainants' counsel may inspect the same.)

(Excepted to by def'ts.)

Q. Are you able to state, of your own knowledge and by refreshing your memory from this paper, A, what the gross receipts from all sales in the business of the defendants was from Oct. 6, 1869, to June 1, 1871?

A. I am.

Q. Will you state what the gross amount of sales was during that period?

A. $91,165.32.

Q. Have you similar knowledge of the whole amount of receipts from sales of the tremolo-attachments, of which an accounting has heretofore been made, during the same period?

(Objected as to his own knowledge.)

A. I have. It was $3,913.96.

Q. Have you a similar knowledge of the whole amount of the general expenses of said business during the time specified?

A. I have.

147 Q. Please state it, and the general details of which it is made up.

(Objected to unless witness speaks from his own knowledge.)

A. I know of my own knowledge the general expenses of the business and the details. The whole amount was $24,206.88. This is made up as follows: Rent of store during that time was $3,291.67; salaries of clerk-hire, $2,754; freight and cartage, $2,927.81; advertising, $8,427.68; insurance, gas, and fuel, $200. The incidental expenses pertaining to general business came under head of general business.

Q. Please state whether or not the incidental expenses, making the last item to which you were about to testify, were confined to any particular branch of the business, or whether they pertained to the whole general business.

A. They pertained to the general business.

148 *A*. What was the amount of those incidental expenses?

A. $6,605.72.

Q. Please state some of the class of expenses of which that last account was composed?

A. One of them would be printing. I cannot give the amount. We have had some considerable expense, too, in getting up wood-cuts, mostly of organs, postage, books, and stationery, travelling expenses—some expense for boxes, tools—a thousand and one little items coming in that I could hardly classify.

Q. Did all these incidental expenses go into one general expense-account?

A. They did.

Q. Was the statement Exhibit A, or the items of account which it contains, prepared by you with the assistance of the books of account of the defendants?

A. I superintended the whole. I had an assistant, but I oversaw the whole of it.

Q. Is that statement correct, to the best of your knowledge

149 and belief, in all its details?

A. It is so. There may be, perhaps, a slight variation in some of

those items, but nothing essential; it is barely possible that we may have overlooked some of the entries.

(Defendants' counsel, in answer to the objection of the complainant made hereinbefore, informs the master and counsel for complainants that they are at liberty to cross-examine this witness, or either of the defendants, or to inspect any of the books of account of the defendants, to satisfy themselves of the correctness of the foregoing statement.)

Q. Have you a personal knowledge from which, refreshed by examination of the statement A, you can state that the total amount of general expenses, or expenses of the general business, is $24,206.88.

A. I have.

(Defendants' counsel calls upon complainants for the production of complainants Exhibits B and C in this suit, to enable him to offer proof under the allowance of the second exception)

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Cross-examined; direct suspended on 2d branch:

X Q. Do you know anything about the gross amount of sales in the business of the defendants, except what you have seen stated in figures in the books of account?

A. I have no means of arriving at whole amount, except from books. I had charge of the books of account, and was cognizant of almost every sale made.

X Q. How many sales were there made?

A. I could not give the exact number of sales, except from books.

X Q. How many sales were you personally cognizant of?

A. I could not give the number of those without referring to the books.

X. Q. Can you give any idea of the gross amount of sales in your business except what you have derived from your remembrance of the figures in the books of account?

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A. Well, every month I always knew what amount of sales of that month was, but could not get at amount without looking at the minutes.

X Q. Were you told not to produce here before the master, to-day, the books from which you derived your knowledge of the amounts and figures which you have stated in your direct examination?

A. No, sir.

X Q. Why did you not produce them?

A. I was not aware that they would be needed.

X Q. Have you any knowledge of any of the items which you have given, except your remembrance of the figures and additions that you have made for the purposes of this examination from the books of account?

A. I have a knowledge at the time of the entry that they were all correct. I had a knowledge of the facts, but had no knowledge of the total amount. I know those disbursements were made, because they were made by me.

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X Q. Of what did the business of the defendants consist during the period of which you have spoken?

A. Dealing in organs and pianos.

X Q. Of whom did you rent those pianos?

A. The agents were Van Renseller and Cruger. I don't know the owner. Their office is in Grand st., not far from Elm, I think. We occupied during that time only the main floor that we were on up to last May. After May we had a room up stairs connected with it. We paid $2,000 per annum up to last May; since that, $1,500. There was nothing but the single room on the first floor up to 1st of last May under

that rent. We have the leases at the store, I believe. There was connected with the establishment at that time a man to repair organs
153 by the name of Carl Schell. We had some three or four different boys, two young men that we got for assistant book-keepers—they stayed with us but a short time—and myself. We had another man. My impression is that he left before the 6th of October. We had one man all the time for repairing. We sometimes had a boy at the time we had the assistant book-keepers. I think at that time the repairer's wages were $14 per week; the duties were repairing and taking care of the organs, repairing in-door and out. We frequently repaired parts of the organs *con* connected with the tremulo while they were out. New organs frequently wanted overlooking in different parts. I don't know as I could specify any date when we did anything about tremulo; it was very common thing for him to do; in transferring organs, things were likely to get out of place; the tremolo was quite likely to do so.
154 They paid me up to May 1, $1,200 per annum. I think I only credited myself at $15 per week up to May 1, 1871. After that, $1,200 per annum. I received $780 per annum up to May 1. The workman had $14 per week, not less. The boys ranged from $4 to $12, including the assistant book-keepers. I could not say how long we had an assistant book-keeper; not more than one-half the time. The rest of the time we had boys; we had boys all the time. I think it averaged about $4 for boys; one we paid $3. We had one boy only at a time at those rates.

X Q. Were all the expenses that you have specified here kept in detail item by item, in an account by themselves?

A. We kept a personal account with those parties. We had a general expense-account in which all these items were detailed. There was nothing in that general expense-account except what is embraced in that paper. There is nothing in that paper which is not found in our
154 general expense-account.

Q. X. During the period from Oct. 6, 1869, to June 1, 1871, did the defendants incur any expenses at all in their business, except for the stock, which is not specified under one head or another in this statement A?

A. No; I don't know that they had.

X Q. In the general expense-account is there a full, true, and just statement of what the items of expense were for?

A. Yes, sir; I don't know that there is an article on there but what you can tell what it was. Items were all entered.

X Q. Then, in this statement A there is included a statement of all expenses incurred on account of these pianos and organs without tremolos as well as these expenses on account of organs with tremolos?
156 A. Yes, sir.

Adjourned to March 18th, 1872, at 11 a. m., at 417 Broome street.

JOSEPH GUTMAN, JR., *Master.*

N. Y., MARCH 18, 1872.

Present, counsel as before, No. 417 Broome st., N. Y.

Examination of witness John M. Tremaine continued by Mr. Valentine:

Counsel for defendants puts in evidence the Burdett organ, marked complainants' Exhibit B in this suit.

Also, the Shoninge organ, marked complainants' Exhibit C in this suit.

Def'ts' Exhibit No. 4 in this suit.

Also, the patent granted to Lafayette Louis, Nov. 18, 1856, and its re-issue of July, 1871, patent not presented.

157 (The last two objected to as immaterial, and because since the account was closed. Received in evidence in presenti; decision reserved as to its admission finally until master can examine the patents.)

Also, letters-patent granted to John R. Loomis, Feb'y 22d, 1870, for connection between the fan and the wind motor; patent not presented. (Objected to as immaterial; same ruling.)

Also, letters-patent granted to Riley W. Carpenter, dated June 4, 1867. Defendants' Exhibit No. 6 in this case.

(Same objection; same ruling.)

Witness examined by Mr. Valentine:

Q. In the tremolo-attachments sold on the Sheninge organs, of which you have heretofore rendered an account, of what did the whole tremolo-attachment consist?

158 A. Of a wind-motor inclosed in a box; attached to that motor was a wire, passing outside the box, bent at right angles; that wire, as the motor passed around, caught a similar arrangement attached to a tremolo, and set it in motion; it also consisted of a fan for producing a tremolo, running parallel to the reeds.

Q. In the Burdett organ what elements was each attachment which you have accounted for composed?

A. Of a wind-motor enclosed in a box, driven by the action of the bellows and a hollow cylinder, one directly opposite the other; this cylinder was driven by a connecting-shaft which attached it to the motor; that shaft consisted of a tightly-wound cord.

Q. Have you had experience in selling both the tremolo-fan and the tremolo-cylinder which you have described?

A. I have.

159 Q. Which could be the most readily sold; that is to say, which did the public with whom you were brought into contact generally prefer?

A. I have always found that the cylinder was very much preferred over the fan.

Q. To what extent?

(Objected to; question disallowed; exception.)

Q. In which of the two revolving devices is the motion imparted with most rapidity and regularity, the cylinder or the fan?

A. The cylinder is driven with less resistance to the air and more regularly.

Q. To what extent, in your opinion and experience, did that feature affect the sales of the tremolo-cylinder as compared with the sales of the tremolo-fan?

A. It affected it to that extent that we gave a great deal more

160 for that cylinder than the other; that is, we were ready to, as we could sell it much more easily. We always got a higher price for organs containing those tremolos than for those containing the other, the organs being otherwise the same.

Q. Is the cylinder which you have described the same device as the device shown in the patent to R. W. Carpenter, def'ts' Exhibit No. 6?

A. It is the same as this marked out here, as far as I understand it. I don't know anything about the patent; it is said to be patented.

Cross-examined by Mr. Betts:

X Q. Have you produced here to-day the books of account of the defendants?

A. I have.

X Q. Please turn to said books, and show the account from which you made up the items or estimates contained in Exhibit A.

A. A large portion of it is on the cash-book. It commences on pages 38 and 39, Oct. 6, of the cash-book, and goes through to the 1st
161 May, 1871, pages 118, 119. There is one month still, in another set of books there; also another portion of it is taken from the day-book, commencing page 325, Oct. 6, going through to page 387.

(Counsel for plaintiff' offers these two books in evidence; objected to as incompetent; objection overruled; exception; they are marked Z and X.)

X Q. Please turn over to the cash-book, Exhibit Z, and from pages 38, 39, Oct. 6, to May 1, 1871, pp. 116, 117, and mark with a' x in lead-pencil on the margin, opposite the items, each and every item which you have included in your statement of expense in Exhibit A.

A. Every item commencing with the words "to expense," is included in that statement of expense, Exhibit A, and no other.

X Q. Please look at the day-book, Exhibit X, and designate
162 each and every item included in the account Exhibit A.

A. All items that are charged "to expense" same as in cash-book, commencing page 325, to page 387.

X Q. In making up the account from which you drafted Exhibit A, did you draw off the different items which are included in the account?

A. I went over the items so far as to designate the items specified in that paper. I took off the amount on a separate piece of paper. In *in* some of the expenses I put down the amount under different heads, such as advertising, and then posted them up. I have not that paper now. After getting at the different amounts, I deducted the whole of these separate items from the amount of expense, showing what the balance was for the various other items *was* that were not mentioned.

X Q. Did you keep copies of any of your advertisements?

A. We never, that I know of, specially kept any of them; but I know we have got plenty of them.

163 (Order made for production of any advertisements in possession of defendants.)

X Q. Have you any means of determining what particular organs or instruments particular charges of freight were on?

A. I could not determine the precise organs. I could tell difference, for instance, between Sheninga organ and Burdett organ.

X Q. I notice that on Exhibit A you specify an item of freight and cartage on organs with tremolo-attachments upon them; how did you determine that?

A. By taking an average of the cost of the freight upon the Burdett organ, all the organs, and giving those reputed as having the tremolo their proportion.

X Q. Was the freight any larger on organs having the tremolo-attachment on them, or those of the same class and style without it?

A. We never had any high-priced organs but what had the
164 tremolo. I don't think there would be any difference.

X Q. Can you tell what particular items of expense in this account are for, except from their description in these books?

A. Well, there may be some items, not fully described, that I would

know when I saw the entry better than any one else, such as small entries, under sundries, &c.

X Q. Did you make any special examination into the particular character of the items, except to see that they came under the head of "expense-account," or under one of the subdivisions which you have mentioned in Exhibit A?

A. I did not; that is, not at the time I was called to make out this account. I have not since.

X Q. Are there any items which you have included in the account Exhibit A, except the items found within the pages specified in the two books X & Z?

165 A. There are the expenses of May, 1871, not included in those books; they are in another set of books.

(Order made for the production of these other books.)

X Q. Did you ever sell any organs except the Sheninga organ and Burdett organ?

(Objected to as immaterial; question allowed; exception.)

A. We had some 4 or 6 organs when we first went into business, which were not Burdett or Shoninga, but I don't know whether sold before Oct. 6 or not. My impression is that they were disposed of before Oct. 6, but we may have had one or two of them. We also had a very few, probably not more than 5 or 6, of the New Haven Company organs. I think that was all the new organs we had of any other make, but we sometimes took second-hand organs in exchange for new, which came into the business.

X Q. Did you ever sell any organs with tremolos upon them except the Shoninga and Burdett?

166 (Objected to as irrelevant; q. allowed; exception.)

A. These organs I mentioned first had the ball-tremolo. The New Haven Co's. organs had no tremolo at all that I recollect.

X Q. In your experience did you not find that the Burdett organ gave much greater satisfaction than the Sheninga?

(Obje'ct' to as irrelevant; q. allowed; exception.)

A. That depends on the prices. There was a difference in price. I don't know but the Shenenga at the price asked gave as great satisfaction as the other. They were different classes of instruments.

X Q. The Shonenga organs were all cheap organs, were they not?

(Objected to as irrelevant; q. allowed; exception.)

A. I don't know as they could be considered cheaper; they were lower-priced. We did not consider them a first-class instrument.

Q. (X.) In the cylinder-tremolo of the Burdett organ, owing to
167 the small resistance of the air and the flexible connection with the motor, was not the tremolo liable to run for a little time after the stop was shut off?

A. Not if the machine was perfect. There was a brake-attachment for the purpose of stopping it.

X Q. Did the Burdett tremolo start as readily as the Shonenga?

A. When the organs were new, it sometimes would not till it got worn a little; would be a little stiff; very little. Use, however, would overcome that usually.

X Q. Did it not always require that the flexible connection between the motor and the cylinder should twist a little, so as to get some power of tension on it before the cylinder started?

(Objected to as not upon the subject introduced in the direct; that is to say, this witness not offered as an expert, and also that
168 the machine is present before the master; q. allowed; exception.)

A. I have never discovered anything of that kind in perfect instruments. Sometimes when the instrument was new there would perhaps be something rough that would have to be smoothed to have it run perfect.

X Q. In which tremolo, the Shenenga or the Burdett, is the means for imparting and regulating the motion the better, in your opinion?

(Objected to as before, that the witness' opinion on this point is not competent; q. allowed; exception.)

A. I think they are both good enough. I don't think there is any great difference in them. We never found any particular difficulty in either one where the instruments were perfectly constructed.

X Q. In which was the motion imparted the most regularly?

(Same objection; same ruling; exception.)

A. When the motive-power was perfect, I consider the cylinder the most regular.

169 X Q. Did you ever have any complaints of the want of regularity in the fan as arranged in the Shonenga instrument?

(Same objection; same ruling; exception.)

A. We have had objections made to the fan as compared with the cylinder by our agents; I don't know that the term regularity was used.

X Q. Did you ever have any complaints as to any want of regularity in the fan as arranged in the Shonenga organ?

A. They did not like the tremolo as well as the other. Very likely it might have been because it did not work so easily. That is all I know in regard to what others have said about it. I have my own ideas in regard to it.

X Q. In your opinion, is the means of imparting motion to the tremolo better in the Shoninge' instrument or in the Burdett?

170 (Objected to as incompetent, and as on matter not subject of direct examination. Q. allowed. Exception.)

A. I don't know that my opinion would be of any great value on that point. The difficulty, where any has been experienced by me, has been generally in a want of power to start the tremolo, as sometimes in new instruments, where there is a little binding, or something of that kind, —the bearings not sufficiently worn and smooth—the power would not be sufficient to start them at first; but that difficulty is not often experienced, seldom in either case. Where they work smoothly and easily I am not aware of there being much difference in regard to starting them.

Q. (X.) The lack of power which you speak of is a lack of power in the wind-motion, is it?

(Same objection. Same ruling. Exception.)

A. Yes, sir.

Q. (X.) Which do you regard the better as a means of connection

171 between the fan and the motor, the bent wires in the Shoninger instrument, or the flexible cord in the Burdett?

(Objected to as ir'el*l*evant and incompetent. Q. allowed. Exception.)

A. I have not been sufficiently experienced in the mode of connection of the fan in the Shoninger instrument to be able to give an opinion in regard to it. We have not sold but a very few of these. It was a time before I took much notice of the tremolo, since which I have not examined it to any great extent. I would say, however, that the Shoninger would start a little sooner than the other, but not in my judgment to be particularly objectionable.

X Q. Did you ever have any difficulty in selling any of the Burdett

organs, or any complaints made about them, because they did not have the bent wire in the Shoninger instrument?

A. No, sir; never a word on the point.

172 Is the tremolo, in an instrument, most effective when the tremolo-attachment is running very rapidly, or at a medium speed?

(Same objection as to the last q. Allowed. Exception.)

A. The tremolo ought not to go too fast or too slow.

R. D. Are all the entries of expense, which you have included in the statement *a*, incurred during the period between Oct. 6, 1869, and June, 1871?

A. They were. Some entries were made since, but the expenses were incurred at that time.

1. Q. Were the original entries in the books made by yourself?

A. Almost entirely.

(Def'ts' counsel offers to read in evidence the testimony taken before the present master as examiner in the suit of Hitchcock and others vs. Shoninge et al. The testimony offered being that of the three complainants in this action respectively.

173 Objected to, on the ground that said witnesses being within the reach of the defendants, they should be examined orally. Offer ruled out. Exception.

Def'ts' counsel offers in evidence affidavit of Charles M. Tremaine, read upon the argument of the exceptions to prior master's report.

Objected to, for the reason that the party making said affidavit has been here present this morning, and because said affidavit was never read in any proceeding or argument in this case, but was, without ever having been shown or read to compl'ts' counsel, unknown to him, handed in to the judge, attached to the def'ts' counsel's brief.

Offer of affidavit ruled out. Exception.)

174 N. Y., MARCH 22, 1872—1 *p. m.*

Present, Mr. Betts, counsel for complainants.

GEORGE G. SAXE produced as a witness on part of complainant.

I am one of the complainants; I am familiar with the market in regard to the Carpenter fan-tremolo, the patent to which complainants own. It is extensively in use; is manufactured by J. Estey & Co., to the extent of between 400 & 500 per month; also by Mason & Hamblin, to what extent I can't say, but to a considerable extent. I know the tremolo used in the Burdett organ, consisting of a slotted cylinder turned by a wind-wheel; I have been familiar with it in the market, ever since its introduction, nearly three years.

The Carpenter fan was originally run by means of a treadle and clock-work. It was introduced into the market at $25 retail; it was used with that motor for about 3 years.

175 The Carpenter fan, moved by a wind-wheel, has been retailed at $10 most of the time.

Q. Has the combination of the Carpenter fan, with a wind-motor instead of a clock-spring and treadle-motor, ever enabled you to receive a larger or enhanced price?

(Objected to. Admitted.)

A. It has not.

Q. Has the rotary cylinder of the Burdett organ ever been used in the market, to your knowledge, with any other motor than the wind-motor?

(Objected so as immaterial. Objection overruled. Exception.)

A. I don't know that it has.

Q. What is the reputation, in the market, of the Carpenter fan-tremolo as compared with the rotary-cylinder tremolo?

(Objected to as irrelevant. Allowed. Exception.)

A. So far as I am able to judge, the fan is preferred to the cylinder.

176 Q. What, in your opinion, is the best means of moving the fan that has been applied to it since its introduction into use?

A. The tredd'e and clock-work gives the most complete effect, as a tremolo can be produced, when the tones are so that a wind-wheel would not be moved by a current of air under similar circumstances. I am familiar with the mode of connecting the wind-wheel and fan in the Shoninge' organ by means of bent wires. I see no advantage in that method over the one in ordinary use, namely, a wheel having a permanent connection with the fan. There is no difficulty in starting the fan when the wind-wheel is on the same shaft. It starts practically instantaneously on drawing the stop.

Q. Please state, if you know, whether or not the defendants, in the sales of their organs with tremolos on them, availed themselves in any way of the previously-acquired reputation of the Carpenter fan,

177 owned and introduced by you.

(Objected to as leading, incompetent, and irrelevant. Ruled out as leading.)

Q. What do you know in regard to the method taken by the defendants to introduce into the market the tremolo sold by them?

(Objected to on the ground that it assumes a knowledge in the witness of the motives of the defendants. Q. admitted. Exception.)

A. The Carpenter fan-tremolo had acquired a reputation and was selling largely, and the defendants advertised the Carpenter tremolo——

(Objection.)

And marked the boxes "Carpenter's improvement," so that they became successful rivals of ours very soon. We have dealt in organs, melodeons, and instruments of that class, and have been familiar with them for about 10 years. I have sold instruments of nearly all the leading makers, and have been pretty well acquainted with the trade generally.

178 Q. Is it not difficult to introduce a new organ into the market readily?

(Objected to as irrelevant. Q. Admitted. Exception.)

A. It usually requires a great deal of time and expense.

Q. Was the Burdett organ with the Carpenter rotary tremolo introduced into the market readily and quickly or otherwise?

A. Readily I should say.

Q. To what cause or causes was that due in your opinion as a member of the trade dealing in organs?

(Objected to as irrelevant and incompetent. Q. Admitted. Exc'n.)

A. In my opinion it was largely owing to the fact that the Carpenter tremolo was advertised, and it was also claimed that Burdett was long connected with the Estey Organ Co., (objected to,) and was competent to make as good an organ as the Estey. I think, also, that the organ was a good one; we have been dealing in the Estey organs about 8 years.

179 (Q. To what extent did the introduction of the Carpenter fan into the Estey organ increase the sale of that organ?

Objected to as irrelevant, and that the witness is incompetent to testify on that point. Objection sustained as irrelevant.)

Q. To what extent, if any, did the introduction of the rotary cylinder-tremolo in the Burdett organ contribute to the rapid sale of these organs, if at all, in your opinion as a member of the trade?

(Same objection as before. Q. admitted. Exception.)

A. I can only speak comparatively. We could scarcely sell any organs without the Carpenter fan-tremolo, and I have no doubt that the introduction of the Carpenter cylinder-tremolo had the same effect on the trade.

(Objected to as speculative.)

Q. In your opinion as a dealer in organs, has the Burdett rotary
180 cylinder, arranged as it has been sold in connection with a wind-motor, any advantage over the Carpenter fan-tremolo actuated by clock-work and treadle, as a merchantable article?

(Objected to as speculative, and because the witness is not competent to testify on the subject. Q. Admitted. Ex'n.)

A Taken as a whole, I think not, though it has the advantage of greater simplicity.

Q. Is there any defect that you know of in the method of actuating or controlling the action of the Burdett rotary tremolo?

A. It is not readily started, as the wheel and fan are connected by a long flexible cord which requires to be twisted some time before the fan starts.

X Q. Does your fan and wind wheel on the same shaft start simultaneously on drawing the stop?

A. Yes, sir.

181 X Q. Does it start as quick with one note as with another?

A. I don't see any difference.

X Q. That is to say, whenever there is wind enough so that you can play on the instrument, the wind-wheel will start instantly?

A. Yes, when you draw out the stop, and will operate so as to make a tremolo.

X Q. What do you mean, then, by saying the treddle and clock-work gives the most complete effect, as a tremolo can be produced when the tones as so low that a wind-wheel would not be moved by a current of air?

A. The clock-work will drive it more rapidly; when the note is very low the wind-wheel turns slowly, and the tremolo is not as satisfactory. I mean a very slight sound. We make them so low that it sounds like an Æolian harp. I mean a gentle sound; a light note can also be produced by only pressing down the key a little way, but not as sat-
182 isfactorily as by a light pressure on the bellows. When the bellows is filled with wind the tone is liable to be more harsh and abrupt, except under the hands of the most skilful performers. I should say that it was not a fact that those beautiful low notes produced by the best performers were due rather to a delicate pressure of the keys than to a nearly exhausted condition of the bellows. I have not seen over half a dozen attachments to the Shoninge' organs. I have never very particularly inspected more than one. I have tried to sell Shoninger organs. I never sold any.

X Q. Did you ever try to sell any Shoninger organ except your Exhibit C, in this case?

A. No.

X Q. Is not that the only one you ever had in your possession?

A. We may have had one or two old ones taken in exchange.
183 I don't know positively of any but that one. I have never sold any Burdett organs. I know the men who deal in Burdett organs

and have them for sale. I never saw them make any sales. I know they keep them, and sell them. I think I never had more than one in my possession, which is Exhibit B in this case.

X Q. Did you ever see the def'ts in this case sell an organ of any kind?

A. I have seen them offering them for sale. Have seen them offering them to customers. I never saw the defendants write any advertisements. I have seen them often printed. I have never seen the defendants mark any of their boxes; have seen them standing on the sidewalk with the marks on them. I have acted as agent for other organ-manufacturers besides Estey; for Treat & Lindsay of New Haven, and have bought of the manufacturers and sold Parkhurst & Needham's, Pelonbet & Pelton's, Prince's, Mason & Hamblin's. The greater
184 portions of these are not instruments taken in exchange. Most of them were bought prior to our becoming agents of the Estey organ.

X 2. Please state when the Burdett organ was first introduced into the market, if you know. When did you first see a Burdett organ, and where?

A. I think they were introduced in the spring and summer of 1869. The first one I saw was at Tremaine's, (def'ts',) in Broome street.

X Q. Where, besides, did you ever personally see any Burdett organs offered for sale?

A. I cannot recall any now that I have seen except at Somerville, N. J., at Renwick's place. I forget name. I examined but one. I don't know that they had more.

X Q. Did you ever know of a Burdett organ sold without a cylinder-tremolo?

A. No.

X Q. Are you a musician yourself?

185 A. I sing.

X Q. Can you play upon the organ?

A. Not well.

X Q. Can you play any tune upon the organ requiring the use of both hands, and making a chord of more than two notes in the treble and bass?

A. I don't think I can.

X Q. Do the majority, or anywhere near it, of the Estey organs pass through your hands for sale?

A. No, sir.

X Q. Of the Estey organs which you have sold since 1869, has the amount been materially in advance of the amount sold during the two years previous by you?

A. They have increased in regular ratio since the spring 1866, as near as I can calculate.

X Q. In the year 1869 you dropped the use of the clock-work substantially, and since that time have substituted the wind-motor, have you not?

186 We have used that mostly. The object of the change was the greater simplicity in the mechanism. That was all.

X Q. Were you not enabled to sell the attachment cheaper, for that reason?

A. We reduced the price about that time, and I think it would cost some less to make, and much less to keep in repair. The price was reduced from $25 to $10.

X Q. Is it not a fact that a change from a wind-motor enabled you to more successfully compete with Mason & Hamblin in the sale of organs?

A. I think it did, owing to its simplicity.

R. D.:

What did Mason & Hamblin charge for putting on a tremolo like yours, with the wind-motor?

(Objected to as hearsay. Q. admitted. Ex'n.)

A. Nothing extra. I know from their price-lists and from Henry Mason, one of the firm, telling me so. It was about the time that
187 we adopted the wind-motor that we reduced the price, though we sold some at the same price as the clock-work.

R. D. When you sell fan with clock-work now, what do you charge for it?

(Objected to as irrelevant. Q. admitted. Ex'n.)

A. We sell so few of them that I think we charge more than we do for the wind-wheel.

R. D. What were you accustomed to pay Estey for the tremolos when they were put on with the clock-work?

(Objected to as irrelevant. Q. admitted. Ex'n.)

A. I don't remember now just what we did pay.

R. D. What opportunities have you had for the last two years for examining and testing the Burdett and Shoninger organs with their tremolo-attachment?

188 A. We have had one of each kind in our store most of the time. I have tried a great many experiments with them as to the mode of operating with them, &c.

1. R. X. Did you unscrew them, and take them apart soon after you bought them—the tremolo-attachments, I mean?

A. We unscrewed and removed the cylinder-tremolo at different times; not the other. We have not rented them; have not had either of them out of the store in private houses. It has not been in the store ever since the hearing of the cause last March. We loaned it for awhile to the mission connected with the church I attend until we could supply them with a new one. They had it about 3 months. I think we sold the last tremolo, with clock-work motor, 2 months ago—a new one ordered from the factory. The next before that was 3 or 4 months before the last. In all cases the clock-work had to be worked by a third
189 pedal. The wind-motor is worked by wind from the bellows forced by the same pedal that actuated the reeds.

R. D. Please state, if you know, in what estimation the clock-work and the wind-motor are held by good musicians.

(Objected to as hearsay. Q. admitted. Ex'n.)

A. There are many musicians who much prefer the third treddle and clock-work, because it is more completely under their control.

(S'd) GEO. G. SAXE.

190 N. Y., MARCH 27, 1872.

Present, counsel as before.

WILLIAM F. SHERWIN called & sworn as a witness for complainant:

I have been connected with the business of buying and selling organs, more or less, for 20 years. I am familiar with such instruments from their first invention. When the Burdett Organ Co. was first started in Chicago I was familiar with the instrument, Mr. George Lyon being an old personal friend of mine. I was general manager of the music-house of Forth, in New York, at 563 Broadway, and Mr. Forth took the agency of the Burdett organ here. I am considerably familiar with the trem-

olo of the Burdett organ and its means of motion. I don't know that I know all the means that were ever used. After Forth sold out Sherwin & Herbert held the appointment as agents for the Burdett
191 Organ Co. at New York.

(Objected to as irrelevant. Admitted. Exception.)

At that time I investigated very thoroughly what they claimed as improvements over the old Carpenter tremolo.

(Objected to as hearsay. Obj. overruled. Except'n.)

I have been perfectly familiar with the Carpenter fan-tremolo for years. Have sold a great many organs having them in. I am a great deal familiar with the Shoninger organ, having the Shoninge fan-tremolo in them; we used to buy a great many organs of them with their tremolo.

I have not paid recently any particular attention to the Burdett organ, so that I don't know whether I could give any particular description of the tremolo in them. I was shown from time to time various devices for propelling the fan, in most of which the string-arrangement figured largely. The motor of the fan was a wind wheel; the principal
192 difficulty seemed to be the making the connection between the fan and the motor-wheel; the string was used mostly as a connection between the wind-wheel and the fan. I think some of the fans had two wings and some 4. I am not positive; I have not charged my mind with it. I have seen some in the shape of a cylinder with openings in it.

The motive-power in the Carpenter fan-tremolo, the first and principal one that I know, was a treddle working up a large spring, which put in motion a clock-work that ran the machine. When properly used, this was the best that I saw.

In the Shoninge organ, one connection was a wire put on at an angle in the disc of the wheel to loop on with another wire, protruding from the shaft of the fan so that the' could lock together when it came around.

Q. What was the ostensible purpose of that?

A. What they were seeking after in all these things was to get
193 quickness in starting and stopping.

Q. Now please state whether in your opinion as a person dealing in different kinds of organs, and familiar with different kinds of tremolos, there was any advantage in the means you have described as used on the Burdett tremolos for imparting or regulating the movement of these tremolos over the means used for the same purpose in the Carpenter instrument. State which was the better.

(Objected to on the ground that *that* the witness' competency to answer this has not been shown. Obj. allowed.)

Q. Are you a performer upon reed-instruments?

A. Yes, sir.

Q. Have you performed upon the Burde*ll* organ with the tremolo?

A. A good many times; also, upon the Shoninge organ with this tremolo that I have been speaking of; also, upon several instruments
194 with the Carpenter tremolo, the Estey instruments, and those made by the Brattleboro' Co. and the Birmingham organ.

Q. Do you know in which arrangement of the motive-power and connection with the tremolo, which you have described as existing in the above organs, the motion is communicated most instantaneously, regularly, and effectively?

A. Upon the question of effectively, I never have seen any tremolo so effective as the Carpenter tremolo with the clock-work, which I have described. I have seen the fan-tremolo in an Estey organ with a wind-wheel, which started as quickly to all practical purposes, practically

quick enough. There are beautiful effects to be had by the clock-work tremolo, which cannot be had by any other. I think the Burdett arrangement is not as good as the wind-wheel arrangement in the Estey organs, which I have seen; they are very satisfactory in the Burdett so far as propulsion is concerned, but it is not possible to produce
195 so fine an effect as with what was formerly known as the Carpenter tremolo. With the cord-arrangement in the Burdett organ there always seemed to me to be a disadvantage, partly on account of the length of the cord; it hindered a quick starting; you would have to give time for the cord to twist. I don't think there was any particular use of the wires in regard to rapidity of starting. I think that was inferior to the Burdett. I am a composer of music professionally and a conductor of musical societies and conventions; this brings me into contact with all these instruments.

X. I am a partner in the firm of Sherwin & Herbert, who sell organs. With a single exception, I think it is about 5 years ago that I was selling Burdett organs at Forth's. I am not certain.

We never sold any Burdett organs with the cylinder-tremolo
196 on. I can testify specially on the cylinder-tremolo except from impressions derived from the use of instruments with the cylinder-tremolo on them. I cannot tell how long since I played on one. I frequently play on a Burdett organ with a tremolo on them with' looking to see what tremolo. I feel quite sure, but will not swear positively, that I have played on one lately with the cylinder tremolo. I don't generally stop to look which it is.

Q. It is your opinion, is it, that the greatest value and the best effect of the Carpenter tremolo is due more to the mechanism that operates it than to the peculiarity of the fan itself?

A. The two are inseparably connected, but the shape of the fan, whether with 2 or 4 wings, I never regarded as of any particular consequence. Given a fan, then the manner of propelling the fan by the clock-work is best.

197 Q. Is it, or is it not, in your opinion, of more importance to have a good actuating or motive power for the fan, than it is to have any particular shape or form of the fan itself—that is to say, which of the two elements, in your opinion, is of the greater importance or first to be sought?

A. It depends upon circumstances.

Q. Then you are not so positive as you were that the clock-work was the best?

A. I said, given a fan, I considered the clock-work the best.

Q. Which do you consider of the most importance, perfection in the actuating-mechanism or perfection in the shape of the fan?

A. It depends upon circumstances. Perfection in either, with serious imperfection in the other with which it is combined, would render the whole combination worthless; a good and satisfactory fan given, then I could say which motive-power I would prefer.

198 Q. If you had but the choice of one, would you prefer to have the choice of actuating-mechanism or of the fan?

A. It is hardly a supposable case, because I should refuse to have one unless I had the selection of both. I regard most of the fans, probably all, as practically amounting to the same thing—the cylinder approaching it but not like it. I don't think it makes much difference whether there are but 2 wings or whether 4 wings to the fan. I think there is a marked difference with the cylinder. I don't remember how many Shoninge instruments I have ever personally sold; we used to keep them in stock. I cannot tell how long it is since I personally sold one. I have

within 4 years. I have within 2 years; I presume so. I know we had some in stock. I base my knowledge of instruments upon my association with all instruments during my professional life of 20 years and constant use of them, more than the act of selling and dealing, so far as these are concerned.

199 R. D. From your acquaintance with the introduction of the Burdett organ, do you know what particular circumstances contributed to its sale?

A. I think I do.

Q. State what you know?

A. I know that the popularity of the Carpenter tremolo contributed to the sale of the Burdett organ. I refer to the reputation of the original Carpenter tremolo.

(S'd) W'M F. SHERWIN.

200 Circuit court of the U. S., southern dist. of N. Y.

ALONZO HITCHCOCK ET ALS. *vs.* CHARLES M. TREMAIN ET AL. } In equity.

SOUTHERN DIST. OF N. Y.,
City and County of New York, ss:

John M. Tremaine, being duly sworn, says that he is book-keeper of the defendants above named, and that the following statement in regard to the sales, receipts, disbursements, expenses, and profits in and concerning the business of the defendant, as ordered to be considered in the accounting before the master herein, as below given, are true:

The whole amount of receipts, or of sales in the business of the defendants, from Oct. 6, 1869, to June 1st, 1871, was	$91,165 32
The whole amounts of receipts from or sales of tremolo-attachments, consisting of revolving cylinder or revolving fan and the actuating-mechanism, was only	$3,913 96
201 The whole amount of disbursements and expense during the period referred to from Oct. 6, 1869, to June 1st, 1871, incurred in effecting the sales, amounting to $91,165.32, was	[$24,206 88]

This amount [$24,206.88] is made up of the following items, viz:

1 at $125	125	
Rent of store 19 mo's, at $166.67c. month,	3,166.67	3,291 67
Salaries, [$2,754]		[2,754 00]
Freight and cartage, [$2,927.91]		[2,927 91]
Advertising, [$8,427.68]		[8,427 68]
Insurance, gas, and fuel		[200 00]
Incidental expenses pertaining to the general business		[6,605 72]
The freights and cartage on the organs, with tremolo-attachments upon them, amounted, in the time specified, to		[1,402 50]
And the amount of sales of such organs, with the tremolo-attachments, was		$51,087 18
The whole amount of profits made by the defendants during the time specified on the sales of $91,165.32 was only		$4,420 02

(Indorsed:) U. S. circuit court, southern dist. of N. Y. Alonzo Hitchcock et al. vs. Charles M. Tremaine et al. Statements on accounting.

NOTE.—Figures inclosed in brackets were in pencil in original.—PRINTER.

203 U. S. circuit court, southern dist. of New York.

ALONZO HITHCOCK ET AL.
vs.
CHARLES M. TREMAINE ET AL. } On account. In equity.

In order to save the necessity of taking the defendants' original books of account, it is admitted by the respective parties that the foregoing items are the items of expenses entered in the defendants' books, as they appear on such books, between the date of October 5th, 1869, and the date of the master' report.

MATHEWS & BETTS,
Solicitors for Complainant.
B. E. VALENTINE,
Solicitor for Defendant.

204 Circuit court of the United States for the southern district of New York. In equity.

ALONZO HITCHCOCK, GEORGE G. SAXE, AND James H. Robertson
vs.
CHARLES M. TREMAINE AND WILLIAM B. Tremaine.

To the honorable justices of the circuit court of the United States for the southern district of New York.

In pursuance of a decretal order made and entered in this cause, and bearing date the 23rd day of May, 1871, at a stated term of this court, by which it was referred to me, Joseph Gutman, j'r, one of the masters of this court, to take and state the account of profits derived by the defendants from the infringing of the letters-patent issued on the 5th day of October, 1869, to the complainants, for a tremolo-attachment to musical instruments.

And in pursuance of a further order of this court in this cause, dated the 28th day of February, 1872, whereby it was referred back to me as master after a prior report, dated the 6th day of July, 1871, with
205 directions to permit the defendants to prove the general expenses of their business incurred alike to effect the sales of all goods, said general expenses to be apportioned and a part of the same, bearing the same proportion to the whole that the gross sum received from sales of the infringement bears to the gross sum received by the defendants from all sales in their said business, to be added to the expense of the infringing tremolos and allowed to the defendants; and also to permit the defendants to show, if they are able, that they received an enhanced price for their infringing attachments by reason of its connection with the peculiar mode adopted by them of producing or regulating the motion, so that the profits or difference between the costs and price of sale was enhanced thereby.

I, Joseph Gutman, j'r, the master so appointed, do respectfully report as follows:

I have been attended by the counsel for the respective parties, and have heard the proofs and allegations adduced, and I do find and report:

1st. That the gross sum received by the defendants from all sales in their said business during the period specified was $91,165.32.

2nd. That the gross sum received by the defendants from sales of the infringement was $3,913.96.

206 3rd. That the general expenses of their business incurred alike to effect the sales of all goods was $16,868.93.

4th. That the proportion of such general expenses applicable to the tremolo, pursuant to said order, is $729.22.

5th. That of said proportionable part of the expenses be added to the expense of the tremolo, or deducted from the profits previously reported, to wit, $1,238.48, the profit derived by the defendants from the infringing tremolo will amount to the sum of five hundred and nine dollars and twenty-six cents.

No detailed statement of general expenses was offered before me on the part of the defendants, nor did they prove specific items of general expense, except the items of rent, salaries, freight and cartage, advertising, insurance, gas, and fuel. The only statement offered in evidence by them is the paper annexed to the testimony, marked A; and their books, introduced in cross-examination, frequently give no sufficient designation of the items of expenditures, and would consume great time in their thorough examination. I, therefore, after the close of the hearing, requested both parties to submit analyses of these books. (These analyses are filed with the testimony.) I have adopted the figures of the defendants' analysis except where they are at variance with

207 the previous sworn testimony, and I have allowed as general expenses the following sums and items:

Rent of store	$3,291 67
Salaries	2,754 00
Advertising	8,427 00
Stationary and printing	1,405 28
Telegraphing	47 78
Office furniture and fixtures	239 35
Expressage	28 12
Stamps	145 47
Labor	79 30
Tools	11 50
Dusters & cham	13 73
Coal and gas	48 80
Mercantile agency	212 50
Insurance	113 75
Revenue-tax	50 00

I have disallowed the following items, and for the following reasons:

1. Freight and cartage $2,927 81

For the reason that freight and cartage were shown to be expenses pertaining peculiarly and exclusively to the dealing in organs and pianos, the defendants paying nothing for the transportation of tremolos, the same charge being made for instruments with and without them, and for the further reason that the defendants produced no

208 proof as to what freight and cartage was chargeable to pianos, and what to organs.

2. Travelling expenses $2,379 97

For the reason that no sufficient proof was given of the purposes of such expenses, or whether the same were incurred on account of the general business.

3. Commissions and collecting $2,184 14

For the reason that all such as were incurred in selling the tremolos and instruments containing them were considered and allowed in the

former report, and all others were considered in estimating the gross amount of sales.

4. Turning, repairing, &c..... $348 05

For the reason that it does not appear whether incurred on account of pianos exclusively, or how otherwise.

5. Piano-rent $66 50

For the reason that the order of February 28th does not allow the same.

6. Sprinkling $16 00

For the reason that it is not properly an expense of the business.

7. Sundries..... $238 98

For the reason that the items are not shown to be allowable under the order.

209 8. Legal fees..... $268 35

For the reason that they are not shown to be allowable.

I further find and report that it does not appear that the defendants have received an enhanced price for their infringing attachments by reason of its connection with the peculiar mode adopted by them of producing or regulating the motion, and that no portion of the profits received by them is shown to have been due to their mode of regulating the motion of the patented improvement.

I do therefore find and report that the defendants have derived and received, by reason of the infringements complained of, the sum of five hundred and nine dollars and twenty-six cents.

All which is respectfully submitted.

N. Y., April 15th, 1872.

JOSEPH GUTMAN, JR., *Master.*

(Endorsed:) United States circuit court, southern district of
210 New York. In equity. Alonzo Hitchcock et al. vs. Charles M. Tremaine et al. Master's report under order of rehearing on accounting of profits after final decree.

211 U. S. circuit court, southern dist. of New York.

ALONZO HITCHCOCK ET ALS.
vs.
CHARLES M. TREMAINE ET AL. } In equity.

Exceptions taken and filed by the defendants herein to the report of Joseph Gutman, jr., one of the masters of this court, to whom it was referred to take an account of the profits made by the defendants; which accounting was taken in pursuance of orders of this court, dated on, respectively, the 23rd day of May, 1871, and the 28th day of February, 1872; said master's report bearing date the 15th day of April, 1872.

FIRST EXCEPTION.—For that said master hath, in and by his said report, certified that the only general expenses of their (the defendants') said business, incurred alike to effect the sales of all goods, was sixteen thousand eight hundred and sixty-eight dollars and ninety-three cents. ($16,868\frac{93}{100}$,) and that the proportion of such general expenses applicable to the tremolo, pursuant to the orders in this cause, was

only seven hundred and twenty nine dollars and twenty-two cents, ($729\frac{22}{100}$,) whereas said master should have certified that the amount of general expenses incurred in said business during the period em-
212 braced in the accounting was a larger amount, to wit, about twenty-one thousand two hundred and seventy-nine dollars and seven cents, ($21,279\frac{07}{100}$,) and that the proportion of said expenses applicable and chargeable to the tremolo-attachments was one thousand and twenty dollars and ninety-six cents, ($1,020\frac{96}{100}$.)

SECOND EXCEPTION.—For that said master hath, in and by his said report, certified that the defendants produced no proof as to what freight and cartage was chargeable to organs sold by them, and that the item of freight and cartage should not be allowed to the defendant as a portion of their general expenses; whereas said master should have certified that the defendants proved that the sum of one thousand four hundred and two dollars ($1,402\frac{50}{100}$) was expended by them as freight and cartage on the organs sold by them containing tremolo attachments, and that said sum of one thousand four hundred and two dollars and fifty cents ($1,402\frac{50}{100}$) should have been considered and allowed as a portion of the expenses of their business.

THIRD EXCEPTION.—For that said master hath, in and by his said report, certified that there was no proof of the sum of two thousand three hundred and seventy-nine dollars and ninety-seven cents,
213 ($2,379\frac{97}{100}$,) the amount of travelling expenses, having been incurred on account of the general business, and that said item should not be allowed; whereas, if the said master took any judicial notice of said item, he should have certified that the said sum of two thousand three hundred and seventy-nine dollars and ninety-seven cents ($2,379\frac{97}{100}$) was proved to have been incurred as an expense of the general business, and should have allowed the same.

FOURTH EXCEPTION.—For that said master hath, in and by his said report, certified that he has disallowed as an expense of the business the item of two thousand one hundred and eighty-four dollars and fourteen cents, ($2,184\frac{14}{100}$,) commission and expenses of collecting, and that the same was considered in estimating the gross amount of sales, wherein the said matter had not been theretofore considered; and if said master took notice of the said item of two thousand one hundred and eighty-four dollars and fourteen cents, ($2,184\frac{14}{100}$,) as distinct from the gross amount of general expenses, he should have certified that said sum of two thousand one hundred and eighty-four dollars and fourteen cents ($2,184\frac{14}{100}$) was incurred as an expense of the general business, and should have allowed the same.

214 FIFTH EXCEPTION.—For that said master hath, in and by his said report, certified that he has disallowed the item of three hundred and forty-eight dollars and five cents ($348\frac{05}{100}$) for tuning, repairing, &c.; whereas said master took notice of said item as distinct from the gross amount of expenses, he should have certified that said amount of three hundred and forty-eight dollars and five cents ($348\frac{05}{100}$) was incurred as an expense of the general business, and should have allowed the same.

SIXTH EXCEPTION.—For that said master hath, in and by his said report, certified that he has disallowed as an expense of the business the sum of sixteen dollars ($16) for sprinkling; whereas if said master took notice of said item as distinct from the gross amount of expenses, he should have certified that said amount of sixteen dollars ($16) was incurred as an expense of the general business, and should have allowed the same.

SEVENTH EXCEPTION.—For that said master hath, in and by his said report, certified that he has disallowed as an expense of the business the sum of two hundred and thirty-eight dollars and ninety-eight cents ($238\frac{98}{100}$) for sundries; whereas if said master
215 took notice of said item as distinct from the gross amount of expenses, he should have certified that said amount of two hundred and thirty eight dollars and ninety-eight cents ($238\frac{98}{100}$) was incurred as an expense of the general business, and should have allowed the same.

EIGHTH EXCEPTION.—For that said master hath, in his report, certified that he has disallowed, as an expense of the business, the sum of two hundred and sixty-eight dollars and thirty-five cents for legal fees, whereas if said master took notice of said item as distinct from the gross amount of expenses, he should have certified that said amount of two hundred and sixty-eight dollars and thirty-five cents ($268\frac{35}{100}$) was incurred as an expense of the general business, and should have allowed the same.

NINTH EXCEPTION.—For that said master, upon the accounting, refused to allow to be read before him the depositions or testimony of the complainants in this cause, which had been taken previously for use in court, whereas said master should have allowed the said depositions or testimony to be used before him.

TENTH EXCEPTION.—For that said master hath certified, in and
216 by his said report, that it does not appear that the defendants have received an enhanced price for their infringing attachment, by reason of its connection with the peculiar mode adopted by them of producing or regulating the motion, and that no portion of the profits received by them is shown to have been due to their mode of regulating the motion of the patented improvement, whereas the said master should have allowed the proofs named in the last exception to be used, and should have certified that there was proof of said matter.

Wherefore the defendants pray that each and all of the above exceptions may be allowed, and that the said report may be referred back by this honorable court to said master, with instructions to proceed in conformity with the allowance of said exceptions.

B. E. VALENTINE,
Defendants' Sol'r.

Dated New York, May 17th, 1872.

(Endorsed:) Circuit court of the U. S., southern dist. of N. Y.
217 Alonzo Hitchcock et al. vs. Charles M. Tremaine et al. Exceptions to report of master, dated April 15th, 1872. Exceptions overruled June 20th, 1872. S. B. B. E. Valentine, def'ts' sol'r., 26 Court street, Brooklyn. Filed May 17, 1872.

218 Circuit court of the United States, southern district of New York.

ALONZO HITCHCOCK ET AL.
vs.
CHARLES M. TREMAINE ET AL.

Exceptions taken by and on the part of the complainants to the report of the master appointed by the interlocutory decree in this cause, said report being dated and filed April 15, 1872.

FIRST.—The complainants, excepting to the said report of said master, say that the said master has erred in that he allowed the de-

fendants to prove any of the general expenses of their business incurred alike to effect the sales of all goods, and has deducted a portion thereof from the profits made by them by their infringement.

This exception is taken—

1st. Because the complainants conceive that this honorable court erred in and by the direction given to the master on that subject in and by the order of February 28, 1872.

2nd. Because the proofs now show that no part of such general expenses are justly allowable to the defendants.

219 SECOND.—The complainants, further excepting, say that the said master, in and by said report, erred, in that he has allowed, as part of the expenses of business to be apportioned as general expenses, and has credited a part thereof to the defendants, against the said infringement, the following items:

1st.	Stationary and printing	$1,405 28
2nd.	Telegraphing	$47 28
3rd.	Office furniture & fixtures	$239 35
4th.	Expressage	$28 12
5th.	Labor	$79 30

Whereas said master ought not to have credited to the defendants or taken into the account any portion of said sums, because said defendants did not prove what part, if any, of said expenses were allowable under said order of February 28th.

In all which particulars the report of said master is, as the complainants are advised, *is* erroneous, & the complainants appeal therefrom to the judgment of this honorable court.

Dated May 10, 1872.

FREDERIC H. BETTS,
Compl'ts' Counsel.

220 (Endorsed:) U. S. circuit court. Alonzo Hitchcock et al. vs. Charles M. Tremaine et al. Exceptions to the master' report, filed Ap'l 15, 1872. Exceptions overruled June 20, 1872. S. B. Filed May 20, '72.

221 U. S. circuit court, southern district of New York.

ALONZO HITCHCOCK ET AL.
vs.
CHARLES M. TREMAINE ET AL.

SIR: Take notice that exceptions to the master's report herein having been filed by both parties, such exceptions now stand for hearing before the court now in session, pursuant to the 83rd rule of the Rules of Practice in Equity of the courts of equity of the United States, and that the same will be brought on for hearing on the calendar of this court, now being heard before his honor Judge Blatchford, as soon as the same is reached, or counsel can be heard.

May 23rd, 1872.

MATTHEWS & BETTS,
Compl'ts' Sol'rs.

To B. E. VALENTINE,
Def'ts' Sol'r.

(Endorsed:) Alonzo Hitchcock et al. vs. Charles M. Tremaine

222 et al. Notice of hearing of exceptions. Matthews & Betts, compl'ts' sol'rs, 31 & 33 Pine st.

Personal service of the within paper admitted.

B. E. VALENTINE,
Def'ts' Sol'r.

223 Circuit court of the United States, southern district of New York.

ALONZO HITCHCOCK, GEORGE G. SAXE, AND James H. Robertson
vs.
CHARLES M. TREMAINE AND WILLIAM B. TREMAINE.
} In equity.

The defendants above named, prior to the entry of final judgment or decree in the above-entitled cause, object to the entry of final judgment herein, and object to the overruling of the exceptions of the defendants to the master's report, which bears date April 17th, 1872, and except and object to the confirmation of said master's report, for, amongst other things, the following reasons:

They object to the overruling of said exceptions and to the confirmation of said master's report—

1. Because, as it will appear from the statement under oath of their solicitor, herewith submitted, that neither he nor they had the notice which the law entitles them to of the hearing of said exceptions.

2. They never had the opportunity of arguing said exceptions as they were and are entitled by law.

3. They never waived the rights which they had of arguing
224 their exceptions in the manner prescribed by law through any admission of their own, or their solicitor, or by his presence even at the irregular hearing of said exceptions.

4. These objections have never been waived by any subsequent tacit acquiescence, for the endorsement on the affidavits submitted herewith show that these irregularities were urged by defendants' solicitor as soon as he discovered their commission, and within three days after such commission.

225 U. S. circuit court, southern dist. of N. Y.

ALONZO HITCHCOCK ET AL.
vs.
CHARLES M. TREMAINE ET AL.
} In equity.

The defendants herein, by their solicitor, B. E. Valentine, hereby object and except to the entry of final judgment in this cause, at this time, for the following reasons:

1. There has been no motion made for final judgment.

The master made his report on accounting of defendants. The complainants, instead of moving to confirm his report, filed exceptions thereto, and argued them.

If the exceptions are all overruled, the master's report must be confirmed, and the complainants must then make a regular motion for judgment, on the preliminary decree and report.

The defendants must have an opportunity to be heard on this motion, for there may be many reasons why judgment should not be entered.

Such motion also being for a final judgment of the circuit court,
226 which is appealable to the Supreme Court, can only be made at a regular term of the circuit court, and cannot be made at chambers, or at any other place than such regular term.

The cause must be placed on the calendar, and when reached, in term-time, the motion for judgment can be made, and the defendants are entitled to show any cause for not decreeing such final judgment.

The defendants have the following objections to the entry of final judgment in this action, which go to the merits, and which will be fully urged when motion for judgment is made, to wit:

1. The decision of the court on the original hearing is erroneous and excepted to, in this:

1. The testimony given by the complainants in support of their bill failed to prove their allegations.

2. They made no proof whatever of their title to the letters-patent upon which they brought their bill, notwithstanding said title was denied to exist in the complainants, and proof thereof demanded by the answer of the defendants.

227 3. The proofs offered by the complainants in support of their bill not only fail to show their title to the letters-patent upon which their bill is founded, but, on the contrary, show that they have no title thereto.

The complainants are not entitled to a judgment against the defendants for the profits which they have made by the sale of infringing devices, because—

They are entitled to a decree for no more than they pray for in their bill.

They ask for an injunction, which they have got.

Thay do not charge defendants with having received profits from the sale of infringing devices.

They limit themselves to a demand for the profits which defendants have received from the use of the infringing devices.

(Endorsed:) U. S. circuit court, southern district of N. Y. Alonzo
228 Hitchcock et al. vs. Charles M. Tremaine et al. Exceptions & objections to entry of final decree. B. E. Valentine, solicitor for def'ts, No. 26 Court street, Brooklyn.

I admit due service of a copy of the within.

Filed Oct. 28, 1872.

229 At a stated term of the circuit court of the United States for the southern district of New York, held at the court-house in said city on the 21st day of October, 1872. Present, Hon. Samuel Blatchford, judge.

ALONZO HITCHCOCK, GEORGE G. SAXE, AND James H. Robertson
vs.
CHARLES M. TREMAINE AND WILLIAM B. TREmaine.

This cause having come on to be heard on the pleadings and proofs, and an interlocutory decree having been made herein, and a reference hav-

ing been ordered to take an account of profits, and said accounting having proceeded, and the master appointed by said decree having made a report on the 8th day of July, 1871, and exceptions having been filed thereto by the defendant, and the same having been heard and a reference having been ordered back to the master to make a further report, and such reference having been procured and a further
230 report having been made on the 17th day of April, 1872, and that exceptions having been filed thereto by both parties, and the same having been heard—

Now, upon consideration thereof, it is ordered that each and all of the exceptions filed to said report of April 17, 1872, be and the same hereby are overruled, and the said master's report be and the same hereby is confirmed.

And it is adjudged and decreed that the complainants do
509 26 recover of the defendants the sum of five hundred and nine $\frac{26}{100}$
dollars, the amount reported by said master, with interest
15 75 thereon from the 17th day of April, 1872, amounting to fifteen $\frac{75}{100}$
283 07 dollars, together with two hundred and eighty-three $\frac{07}{100}$ costs
$808 08 and disbursements, as adjusted by the clerk of this court, amounting in all to the sum of eight hundred and eight $\frac{08}{100}$ dollars, and that the complainants have process for the collection thereof.

SAM'L BLATCHFORD.

231 CITY AND COUNTY OF NEW YORK, *ss:*

Edwin A. Booth, having been duly sworn, says that he is over eighteen years of age, and that he is a clerk in the office of complainants' solicitors herein; that on the 25th day of October, 1872, he served on B. E. Valentine the within papers, by handing to and leaving with a person in charge of his office, No. 26 Court street, in the city of Brooklyn, New York, a true copy thereof, and that the said Valentine was absent at the time.

EDWIN A. BOOTH.

Sworn to before me this 25th day of October, 1872.

CHA'S H. WISSON,
Notary Public in & for the City & County of N. Y.

U. S. circuit court. Alonzo Hitchcock et al. vs. Charles M. Tremaine et al. Final decree.

SIR: Take notice that the within proposed decree will be presented to Judge Blatchford for settlement & signature on the 28th day of October, 1872, at 11 a. m., at the court-rooms of the court.

MATTHEWS & BETTS,
Compl'ts' Sol'rs, 33 Pine St.

232 Due & timely service of a copy of within proposed decree & notice is admitted.
Oct. 25th, 1872.
Filed, Oct. 28, 1872.

233 United States circuit court, southern district of New York.

ALONZO HITCHCOCK, GEORGE G. SAXE, AND James H. Robertson
vs.
CHARLES M. TREMAINE AND WILLIAM B. TREMAINE. } In equity.

To the honorable the Supreme Court of the United States:

The appeal of Charles M. Tremaine and William B. Tremaine, the above-named defendants and appellants, respectfully shows:

That upon the 6th day of December, 1869, the above-named complainants filed their bill in the circuit court of the United States for the southern district of New York against the above-named defendants and appellants, alleging in their said bill that the complainants were owners of certain letters-patent of the United States for an alleged useful invention consisting of a tremolo-attachment to musical instruments, and were the owners of the exclusive rights secured by said letters-patent.

That said letters-patent had been re-issued to the complainants after an assignment to them of the original patent by the original patentee, one Riley W. Carpenter.

234 The said bill further alleged that the defendants had ever since the 1st day of January, 1869, unlawfully made or caused to be made, sold or caused to be sold, used or caused to be used, tremolo-attachments containing said invention, and that said defendants had derived and received and were deriving and receiving from such use great gains and profits; and in said bill the complainants prayed that the defendants might be required to disclose such profits, and to pay the same over to the complainants; and that said defendants might be enjoined from making, using, or selling any machine containing the said invention.

That the defendants appeared in said cause by B. C. Valentine, their solicitor, and duly filed their answer, by which they denied that the complainants were the owners of the letters-patent set forth in the bill, and demanded proof of their title therein. They further denied that they had infringed any of the rights secured by said letters-patent; and said defendants, as a matter of defense, alleged that the said original patentee and alleged inventor, R. W. Carpenter, was not the first inventor of the device or features claimed, and alleged that the same had been previously invented, known, and used by certain persons,

235 to wit, La Fayette Louis, William Haw, Samuel Thatcher, and William Thatcher, whose residences were set out in said answer; and that said invention and discovery had been described in letters-petent of the United States granted to La Fayette Louis, Nov. 18, 1856.

The complainants filed their replication to said answer, by which they alleged that they would prove their bill of complaint to be true, and the answer of defendants untrue.

That Hiram D. Opdyke and Levi K. Fuller were produced as witnesses on behalf of complainants, and their testimony was taken before an examiner; and the complainants put in evidence the following exhibit, viz: Re-issued letters-patent No. 3665, marked Exhibit A; an organ, marked Exhibit B; an organ, marked Exhibit C, and models, marked Exhibits G, H, & I.

That the defendants, in support of their answer, produced as witnesses William Karr, Samuel Thatcher, and William Thatcher, whose testi-

mony was taken before an examiner, and also put in evidence a fan, marked Defendants' Exhibit No. 1; a wheel, Defendants' Exhibit No. 2; certified copy letters-patent No. 16094, marked Defendants' Exhibit No. 4, and certified copy letters-patent No. 65472, marked Defendants' Exhibit No. 6.

236 That the issues in said cause were brought on for hearing on the above specified testimony, exhibits, and proofs at a term of the circuit court of the United States for the southern district of New York, and a decision was rendered in favor of the complainants, and a decree entered on the 23d day of May, 1871, adjudging the complainants' patent valid, that the defendants had infringed, that the complainants were entitled to a perpetual injunction against the defendants, and entitled to an account of the profits derived by defendants from their infringements.

That an accounting was had before a master, and his report and testimony taken before him were filed July 8th, 1871; that exceptions were filed to said report by the defendants, and said exceptions, after a due hearing before the court, were sustained, and the cause referred back to the master for a further accounting; that said master's second report and the testimony taken before him were filed and exceptions were filed to said second report by defendants; that said exceptions were overruled by the court, and

That on the 30th day of October, 1872, a final decree was made and pronounced in the cause, wherein it was adjudged and decreed that the said master's report of April 17, 1872, be confirmed, and that the

237 complainants recover of the defendants the sum of eight hundred and eight $\frac{08}{100}$ dollars damages and costs.

Wherefore these appellants appeal from the whole of said decree of said circuit court of the United States, and respectfully pray that the decree of the said circuit court and the bill, answer, replication, pleadings, depositions, exhibits, evidence, decrees, orders, and all proceedings in the said cause may be sent to the Supreme Court of the United States without delay, and that the said Supreme Court will proceed to hear the said cause anew, and that the said decree of the circuit court and every part thereof may be reversed, and a decree made dismissing said bill of complaint with costs, or such other decree as to the said Supreme Court shall seem just.

B. E. VALENTINE,
Solicitor for Appellant.

GEO. T. CURTIS, of counsel.
Dated November 2d, 1872.

(Endorsed:) United States circuit court, southern district of New York. Alonzo Hitchcock, George G. Saxe, and James H. Robertson vs. Charles M. Tremaine and William B. Tremaine. Appeal to the

238 Supreme Court. B. E. Valentine, solicitor for def't, No. 26 Court street, Brooklyn. Filed November 6, 1872.

239 Supreme Court of the United States.

ALONZO HITCHCOCK, GEORGE G. SAXE, AND James H. Robertson
vs.
CHARLES M. TREMAINE AND WILLIAM B. TREMAINE. } In equity.

Know all men by these present, that we, Charles M. Tremaine, of

Brooklyn, New York, and Luman B. Wing, of No. 306 Clinton avenue, in the city of Brooklyn, and William C. Baker, of No. 20 Cottage Place, in the city of New York, are held and firmly bound unto Alonzo Hitchcock, George G. Saxe, and James H. Robertson in the sum of seventeen hundred dollars, to be paid to the said Alonzo Hitchcock, George G. Saxe, and James H. Robertson, their executors or administrators; to which payment, well and truly to be made, we bind ourselves, and each of us, jointly and severally, and our and each of our heirs, executors, and administrators, firmly by these presents, sealed with our seals, dated the second day of November, 1872.

Whereas the above-named Charles M. Tremaine and William B. Tremaine have prosecuted an appeal to the Supreme Court of the United States to reverse the decree rendered in the above-entitled action
240 by the circuit court of the United States in the southern district of New York:

Now, therefore, the condition of this obligation is such, that if the above-named Charles M. Tremaine and William B. Tremaine shall prosecute their said appeal to effect, and answer all costs and damages if they fail to make good their appeal, then this obligation shall be void; otherwise to remain in full force and virtue.

CHA'S M. TREMAINE. [L. S.]
L. B. WING. [L. S.]
W. C. BAKER. [L. S.]

Sealed and delivered in the presence of—
JOHN A. SHIELDS.

SOUTHERN DISTRICT OF NEW YORK, *ss:*

Luman B. Wing, of No. 306 Clinton ave., Brooklyn, being duly sworn, says that he is one of the sureties named in and who executed the foregoing bond; that he is a resident and householder within the eastern district of New York, and is worth the sum of seventeen hundred dollars over all his debts and liabilities and exclusive of property exempt by law from execution.

L. B. WING.

Sworn to before me this 2d day of Nov., 1872.
JOHN A. SHIELDS,
U. S. Commissioner S. D. of N. Y.

241 SOUTHERN DISTRICT OF NEW YORK, *ss:*

William C. Baker, of No. 20 Cottage Place, New York City, being duly sworn, says that he is one of the sureties named in and who executed the foregoing bond; that he is a resident and householder within the southern district of New York, and is worth the sum of seveenteen hundred dollars over all his debts and liabilities and exclusive of property exempt by law from execution.

W. C. BAKER.

Sworn to before me this 2d day of Nov., 1872.
JOHN A. SHIELDS,
U. S. Commissioner S. D. of N. Y.

SOUTHERN DISTRICT OF NEW YORK, *ss:*

On this 2d day of November, 1872, before me personally appeared the above-named Luman B. Wing and William C. Baker, known to me to

be the individuals described in and who executed the above bond, and severally acknowledged they executed the same.

JOHN A. SHIELDS,
U. S. Commissioner S. D. of N. Y.

242 (Endorsed:) Supreme Court of the United States. Alonzo Hitchcock, George G. Saxe, & James H. Robertson vs. Charles M. Tremaine & William B. Tremaine. Supercedeas bond. B. E. Valentine, solicitor for def'ts, No. 26 Court street, Brooklyn.

Approved Nov. 2, 1872.

L. B. WOODRUFF,
Circuit Judge.

Filed Nov. 2, 1872.

243 By the honorable Lewis B. Woodruff, one of the judges of the circuit court of the United States for the southern district of New York.

To Alonzo Hitchcock, George G. Saxe, and James H. Robinson:

Whereas Charles M. Tremaine and William B. Tremaine have lately appealed to the Supreme Court of the United States from a decree lately rendered in the circuit court of the United States for the southern district of New York, made in favor of you, the said Alonzo Hitchcock, George G. Saxe, and James H. Robertson, and have filed the security required by law: You are, therefore, hereby cited to appear before the said Supreme Court, at the city of Washington, on the first Monday of December next, to do and receive what may appertain to justice to be done in the premises.

Given under my hand at the city of New York, in the southern district of New York, in the second judicial circuit, the 2d day of November, in the year of our Lord one thousand eight hundred and seventy-two.

L. B. WOODRUFF,
Circuit Judge.

B. E. VALENTINE,
Def'ts' Solicitor.
GEO. T. CURTIS,
Of Counsel.

244 (Endorsed:) United States circuit court, southern district of New York. Alonzo Hitchcock, George G. Saxe, and James H. Robertson vs. Charles M. Tremaine and William B. Tremaine. Citation. B. E. Valentine, solicitor for def'ts, No. 26 Court street, Brooklyn.

United States circuit court, southern district of New York.

ALONZO HITCHCOCK, GEORGE G. SAXE, & James H. Robertson
vs.
CHARLES M. TREMAINE & WILLIAM B. TREMAINE.

SOUTHERN DISTICT OF NEW YORK, *ss:*

B. E. Valentine, being duly sworn, says that on the 6th day of November, 1872, at No. 20 Nassau street, in the city of New York, he served

on Frederick H. Betts, solicitor and of counsel for the complainants & appellees in the above cause, the citation & appeal in the said cause, by exhibiting to said solicitor the original citation and appeal, and delivering to and leaving with said Betts, solicitor for the above-named appellees, a copy of the appeal and a copy of the citation filed with the clerk of the circuit court in and for the southern district of New York, and exhibiting said originals to James H. Robertson, one of the above-named appellees in person.

B. E. VALENTINE.

Sworn to this 6th day of November, 1872, before me.

KENNETH G. WHITE,
U. S. Commissioner.

Filed Nov. 6, 1872.

245 United States circuit court, southern district of New York.

ALONZO HITCHCOCK, GEORGE G. SAXE, AND James H. Robertson
vs.
CHARLES M. TREMAINE AND WILLIAM B. Tremaine.
} In equity.

To the honorable the Supreme Court of the United States:

The appeal of Alonzo Hitchcock, George G. Saxe, and James H. Robertson, the above-named complainants and appellants, respectfully shows:

That upon the 6th day of December, 1869, the above-named complainants filed their bill in the circuit court of the United States for the southern district of New York against the above-named defendants, alleging in their said bill that the complainants were owners of certain letters-patent of the United States for an alleged useful invention, consisting of a tremolo-attachment to musical instruments, and were the owners of the exclusive right secured by said letters-patent. That said letters-patent had been twice re-issued to the complainants after an assignment of the original patent by the original patentee, one Riley
246 W. Carpenter, and that they were the owners of said re-issued patent, made or cause to be made, sold or caused to be sold, used or caused to be used, tremolo-attachments containing said invention, and that said defendants have derived and received and were deriving and receiving from such use great gains and profits, and in said bill the complainants prayed that the defendants might be required to disclose all gains and profits they had made, and to pay the same over to the complainants, and that said defendants might be enjoined from making, using, or selling any machine containing the said invention.

That the defendants appeared in said cause by B. E. Valentine, their solicitor, and duly filed their answer by which they denied that the complainants were the owners of the said letters-patent or the re-issues set forth in the said bill, and demanded proof of their title therein. They further denied that they had infringed any of the rights secured by the said letters-patent, and the said defendants, as a matter of defense, allege that the said original patentee and alleged inventor, R. W. Carpenter, was not the inventor of the device or features claimed and alleged; that the same had been previously invented, known, and used, by certain persons, to wit, Lafayette Louis, William Karr, Samuel Thatcher,

and William Thatcher, whose residences were set out in said an-
247 swer, and that said invention and discovery had been described in letters-patent of the United States, granted to Lafayette Louis, November 18th, 1856, number 16,094.

The complainants filed their replication to said answer, by which they alleged that they would prove their bill of complaint to be true and the answer of defendants untrue.

That Hiram O. Opydyke and Levi K. Fuller were produced as witnesses on behalf of complainants, and their testimony was taken before an examiner, and the complainant put in evidence the following exhibits, viz: Re-issued letters-patent No. 3665, marked Exhibit A, and organ, marked Exhibit B; an organ, marked Exhibit C, and models marked G, H, and others. That the defendants, in support of their answer, produced as witnesses William Karr, Samuel Thatcher, and William Thatcher, whose testimony was taken before an examiner, and also put in evidence a fan, marked "Defendants' Exhibit No. 1;" a wheel, Defendants' Exhibit No. 2; certified copy of letters-patent No. 16094, marked Defendants' Exhibit No. 4; and certified copy letters-patent No. 65472, marked Defendants' Exhibit No. 6, and an organ, marked Defendants' Exhibit No. 5, and others.

That the issues in said cause were brought on for hearing on the above-specified testimony, exhibits, and proofs at the term of the circuit court of the United States for the southern district of New York,
248 and a decision was rendered in favor of the complainants, and a decree entered on the 23d day of May, 1871, adjudging the complainants' patent valid; that the defendants had infringed; that the complainants were entitled to a perpetual injunction against the defendants, and entitled to an account of the profits derived by defendants from their infringement. That an accounting was had before the master, and his report and testimony taken before him were filed July 8, 1871; that exceptions were filed to said report by the defendants, and said exception, after a due hearing before the court, were partly sustained, and the cause referred back to the master for a further accounting. That said master's second report and the testimony taken before him were duly filed, and exceptions were duly filed to said second report by both the complainants and defendants—said exceptions were overruled by the court—and,

That, on the 28th day of October, 1872, a final decree was made and pronounced in the cause, wherein it was adjudged and decreed that the said master's report of April 17, 1872, be confirmed, and that the complainants recover of the defendants the sum of eight hundred and eight $\frac{08}{100}$ dollars, damages and costs.

Wherefore the appellants appealed from the said decree of said circuit court of the United States, and respectfully pray that the de-
249 cree of the said circuit court and the bill, answer, replication, pleadings, depositions, exhibits, evidence, decrees, orders, and all proceedings in the said cause may be sent to the Supreme Court of the United States without delay; that the said Supreme Court will proceed to hear as much of the said cause anew as concerns the question of profits recoverable from the defendants, and that the said order of the circuit court containing or partly sustaining the defendants' exceptions to the master's report of July 8, 1871, and the decree of said court overruling the complainants' exceptions to the master's report of April 17, 1872, may be reversed, and a decree made confirming the master's re-

port of July 8, 1871, and decreeing accordingly with costs or such other decree as to the said Supreme Court shall seem just.

Dated November 15, 1872.

FREDERICK H. BETTS,
Solicitor of Appellants & of Counsel.

(Endorsed:) U. S. circuit court. Alonzo Hitchcock & al. vs. Charles M. Tremaine & al. Petition of appeal of complainants. Filed Dec'r 3, 1872.

250 *Bond for costs.*

Circuit court of the United States of America for the southern district of New York, in the second circuit.

ALONZO HITCHCOCK, GEORGE G. SAXE, AND James H. Robertson
vs.
CHARLES M. TREMAINE & WILLIAM B. TREMAINE.

Know all men by these presents that we, George G. Saxe, of the city of Brooklyn, State of New York, and William H. Whiting, of the city of Brooklyn, State of New York, are held and firmly bound unto the above-named Charles M. Tremaine & William B. Tremaine in the sum of two hundred & fifty dollars, to be paid to the said Charles M. Tremaine & William B. Tremaine; for the payment of which, well and truly to be made, we bind ourselves and each of us, our and each of our heirs, executors, and administrators, jointly and severally, firmly by these presents, sealed with our seals, and dated the twenty-seventh day of November, in the year of our Lord one thousand eight hundred and seventy two.

Whereas the above-named George G. Saxe, Alonzo Hitchcock, & James H. Robertson have prosecuted an appeal to the Supreme Court of the United States to reverse the part of the decree rendered in the above-entitled suit by the judge of the circuit court of the United States for the southern district of New York:

Now, therefore, the condition of this obligation is such that if the above-named Alonzo Hitchcock, George G. Saxe, & James H. Robertson shall prosecute their said appeal to effect, and answer all damages and costs if they fail to make their said appeal good, then this obligation shall be void; otherwise the same shall be and remain in full force and virtue.

GEORGE G. SAXE. [L. S.]
WILLIAM H. WHITING. [L. S.]

Sealed and delivered and taken and acknowledged this 27 day of November, 1872, before me.

JOHN A. SHIELDS,
U. S. Com'r S. D. of N. Y.

251 UNITED STATES OF AMERICA,
Southern District of New York, ss:

George G. Saxe & William H. Whiting, both of the city of Brooklyn, State of New York, being duly sworn, do depose and say, each for

himself, that he is worth the sum of five hundred dollars over and above all his just debts and liabilities.

GEO. G. SAXE.
WILLIAM H. WHITING.

Sworn to this 27th day of Nov., A. D. 1872, before me.
JOHN A. SHIELDS,
U. S. Commissioner S. D. of N. Y.

The foregoing bond is approved.
SAM'L BLATCHFORD, *D. J.*

(Indorsed:) Vol. ; page . U. S. circuit court. Alonzo Hitchcock, George G. Saxe, & James H. Robertson vs. Charles M. Tremaine & William B. Tremaine. Bond for costs on appeal. Whitney & Betts, compl'ts' proctor. Filed this 30th day of Nov., 1872.

252 By the honorable Samuel Blatchford, one of the judges of the circuit court of the United States for the southern district of New York.

To Charles M. Tremaine & William B. Tremaine:

Alonzo Hitchcock, George G. Saxe, and James H. Robertson have lately appealed to the Supreme Court of the United States from a decree lately rendered in the circuit court of the United States for the southern district of New York, made partly in their favor, and have filed the security required by law.

You are, therefore, hereby cited to appear before the said Supreme Court, at the city of Washington, on the 1st Monday of December next, to do and receive what may appertain to justice to be done in the premises.

Given under my hand, at the city of New York, in the southern district of New York, in the second judicial circuit, the 27th day of November, in the year of our Lord one thousand eight hundred and seventy-two.

SAM'L BLATCHFORD.

253 (Endorsed:) U. S. Supreme Court. On appeal from the U. S. circuit court, southern district of New York. Alonzo Hitchcock, George G. Saxe, & James H. Robertson vs. Charles M. Tremaine and William B. Tremaine. Citation on appeal, &c. F. H. Betts, compl'ts' sol'r, 20 Nassau st., N. Y. City.

Personal service this day admitted.
Nov. 30, 1872.

B. E. VALENTINE,
Def'ts' Solicitor.

Filed Dec. 3, 1872.

254 U. S. circuit court.

ALONZO HITCHCOCK ET AL.
vs.
CHARLES M. TREMAINE ET AL.

A motion being now pending to correct the record in this cause, or-

dered that the sending of the record herein to the Supreme Court of the United States be stayed for ten days from date.

Dated December 6, 1872.

SAM'L BLATCHFORD.

(Endorsed:) Hitchcock v. Tremaine. Order. Filed Dec. 6, 1872.

255 At a stated term of the circuit court of the United States of America for the southern district of New York, in the second circuit, held at the United States court-rooms in the city of New York, on Monday, the ninth day of December, in the year of our Lord one thousand eight hundred and seventy-two.

Present, the honorable Samuel Blatchford, judge.

ALONZO HITCHCOCK ET AL.
vs.
CHARLES M. TREMAINE ET AL.

On motion to amend the bill herein, so as to conform to the proofs coming on to be heard, after hearing Frederic H. Betts, esq., in support of said motion, and B. E. Valentine opposed, and it appearing that the answer uses throughout the word "re-issues," and that re-issue No. 3444 was not put in evidence by the plaintiffs, and that re-issue No. 3665 was put in evidence by the plaintiffs, without objection; and that the testimony in the cause was taken wholly with reference to re-issue No. 3665; and that the litigation in the cause has been solely in reference to re-issue No. 3665; and that the interlocutory decree has
256 reference to said re issue No. 3665; and that the decision of the court on which such decree was entered was founded on said re-issue No. 3665 as the subject-matter of the litigation in the suit: It is therefore ordered that the original bill herein be, and the same hereby is, amended, so as to conform with the proofs, by inserting immediately after the allegation therein of the re-issue of the complainants' patent on the 19th day of May, 1869, the following allegation, viz:

"And your orators further show that on or about the 5th day of October, 1869, your orators surrendered said re-issued letters-patent, and, upon due proceedings had, the same were again re-issued, according to law, bearing date October 5th, 1869, and numbered 3665, to which said re-issued letters your orators crave leave to refer."

(Signed) SAM'L BLATCHFORD.

(Endorsed:) U. S. circuit court, southern district of New York. Alonzo Hitchcock et al. vs. Charles M. Tremaine et al. Order amending bill. Filed Dec. 9th, 1872.

257 United States circuit court, southern district of New York.

ALONZO HITCHCOCK ET AL.
vs.
CHARLES M. TREMAINE ET AL. } In equity.

The defendants herein excepts to the order amending the original bill, entered in this action and filed December 9th, 1872, as a whole and to every part thereof.

1st. They except to the form of said order in that all the recitation of matters between the words "opposed" and "it is therefore," is contrary to law and prohibited by rule 86, made by the Supreme Court for courts of equity.

2d. They except to said order as a whole in that the amendment of the bill in equity after judgment and appeal is contrary to law.

3d. They except to said order as a whole in that the amendment of the bill of equity after replication filed is prohibited by rule 29 of the rules made by the Supreme Court for courts of equity.

4th. They except to that part of said order which recites "that the testimony in the cause was taken wholly with reference to
258 re-issue No. 3665, as being unwarranted by and without foundation in the record.

5th. They except to that part of said order which recites "that the litigation in the cause has been solely in reference to re-issue No. 3665, as being unwarranted and without foundation in the record.

6th. They except to that part of said order which recites "that the decision of the court on which such decree was entered was founded on said re-issue No. 3665, as the subject-matter of the litigation in the suit," as being unwarranted and without foundation in the record.

7th. They except to the order amending the bill, as on the facts recited such order is unauthorized by law.

8th. They except to the said order amending the bill of complaint after judgments and appeal, in that the court had no jurisdiction of the proceedings in this cause after the citation appeal.

B. E. VALENTINE,
Def'ts' Solicitor.

DECEMBER 9, 1872.

259 (Endorsed:) U. S. Supreme Court, southern district of N. Y. Alonzo Hitchcock & al. vs. Charles M. Tremaine et al. Exceptions to order amending bill of compl'ts after appeal. B. E. Valentine, def'ts' sol'r, 26 Court st., Brooklyn. Filed Dec'r 11, 1872.

260 U. S. circuit court, S. D. N. Y.

HITCHCOCK ET AL.
vs.
TREMAINE ET AL.

To Kenneth G. White, esq., clerk:

Upon the mutual consent of the solicitor for complainants in the cause that no rights of either party are to be affected by the delay, I consent to the transcript of the record on appeal to Supreme Court in this cause may be retained for the purpose of completing the same, not exceeding 15 days, and then sent to clerk of Supreme Court with like effect as if duly transmitted within first six days of term.

B. E. VALENTINE,
Def'ts Sol'r.

DE'C. 16, 1873.

I consent to the above provis'ons & stipulation.

FREDERIC H. BETTS,
Counsel for Compl'ts.

Fil'd De'c. 16, 1873.

ALONZO HITCHCOCK, GEORGE G. SAXE, AND James H. Robertson
vs.
261 CHARLES M. TREMAINE AND WILLIAM B. Tremaine.
} In equity.

For the accommodation of the clerk of the circuit court, and to allow time to perfect the transcript of the record in this cause, the solicitors of the respective parties to this cause jointly consent that the clerk may have ten days' additional time in which to complete the transcript of the record on appeal; and party stipulating to take no advantage of the other on account of, and to raise no objection in the appellate court by reason of, the lapse of time between the taking of the appeal and the transmitting of this record.

B. E. VALENTINE,
Sol'r for Tremaine & al.
WHITNEY & BETTS,
Compl'ts' Sol'rs.

Dated Dec. 31st, 1872.

262 Circuit court of the United States, southern district of New York.

ALONZO HITCHCOCK ET AL.
vs.
CHARLES M. TREMAINE ET AL.
} In equity.

It is, on consent of each of the parties hereto, and in order to give the clerk of this court an opportunity to perfect the transcript of the record of appeal in this cause—

Ordered, that the clerk be allowed until and including the 10th day of January, 1873, time to make up the transcript of the record in this cause, and that the time for the return in said appeal be extended to and including said 10 day of January, 1873.

SAM'L BLATCHFORD.

263 U. S. circuit court, south'n dis. of New York.

ALONZO HITCHCOCK ET AL.
vs.
CHARLES M. TREMAINE ET AL.

Upon the consent of parties, it is ordered that the following original exhibits be transmitted to the Supreme Court of the United States to be used upon the hearing of this cause on appeal:

Complainants' Exhibit A	(Re-issued pat. No. 3665.)
Complainants' Exhibit E	(Rough wood model.)
Complainants' Exhibit F	(Drawing by Karr.)
Defendants' Exhibit 1	(Tin fan & iron shaft.)
Defendants' Exhibit 2	(Wood wheel for driv'g.)
Defendants' Exhibit 3	(Drawings of fan-tremolo.)
Defendants' Exhibit 4	(Patent No. 16094.)
Defendants' Exhibit 6	(Patent No. 65472.)

SAM'L BLATCHFORD.

We consent to the above.

MATHEWS & BETTS,
Complts' Sol'r.
B. E. VALENTINE,
Def'ts' Sol'r.

Filed Jan. 9, 1873.

264 U. S. circuit court, south. dist. of New York.

ALONZO HITCHCOCK ET AL.
vs.
CHARLES M. TREMAINE ET AL.

It is hereby consented that the following exhibits, being bulky, may be retained by the parties having introduced the same in evidence until the time of hearing of the appeal in this cause, when they shall be filed in the office of the clerk of the Supreme Court of the United States.

If any of said exhibits shall, in the mean time, be lost or destroyed, or not produced at the hearing, such hearing shall proceed without them.

The exhibits are as follows:

Complainants' Exhibit B, (Burdett organ.)
" " C, (Shoemeyer organ.)
" " D, (Old-fashion melodeon.)
Defendants' " 5, (Louis tremolo-organ.)

MATHEWS & BETTS,
Compl'ts' Sol'r.
B. E. VALENTINE,
Def'ts' Sol'r.

Filed Jan'y 9, 1873.

265 UNITED STATES OF AMERICA,
Southern District of New York:

I, Kenneth G. White, clerk of the circuit court of the United States of America for the southern district of New York, in the second circuit, do hereby certify that the foregoing pages, numbered from one to 266, inclusive, contain a true and complete transcript of the record and proceedings had in said court in the case of Alonzo Hitchcock et al. against Charles M. Tremaine et al., as the same remain of record and on file in said office.

In testimony whereof I have caused the seal of the said court to be hereunto affixed, at the city of New York, in the southern district of New York, in the second circuit, this tenth day of January, in the year of our Lord one thousand eight hundred and seventy-three, and of the Independence of the said United States the ninety-seventh.

KENNETH G. WHITE, *Clerk.*

(Indorsement on cover:) No. 398. Charles M. Tremaine and William B. Tremaine, appellants, vs. Alonzo Hitchcock, George G. Saxe, and James H. Robertson. No. 399. Alonzo Hitchcock, George G. Saxe, and James H. Robertson vs. Charles M. Tremaine & William B. Tremaine. Filed 14th January, 1873. S. New York C. C. U. S.

RECS. 398-399—8

Supreme Court of the United States.

CHARLES M. TREMAINE, *et al.*,
Appellants,
vs.
ALONZO HITCHCOCK, *et al.*
} *Appeal.*

ALONZO HITCHCOCK, *et al.*,
Appellants.
vs.
CHARLES M. TREMAINE, *et al.*
} *Cross Appeal.*

Brief for Appellants and Defendants.

B. E. VALENTINE,
Counsel for Appellants and Defendants.
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WM. C. WILTON, LAW PRINTER, 397 FULTON ST.
1874.

SUPREME COURT,

OF THE UNITED STATES.

CHARLES M. TREMAINE, *et al.*,
Appellants,

vs.

ALONZO HITCHCOCK, *et al.*,
Respondents.

ABSTRACT OF CASE.

This cause was brought, in equity, before the Circuit Court of the United States for the Southern District of New York, and was based on an alleged infringement of Letters Patent.

The bill recited that the complainants were the owners of Reissued Letters Patent, dated June 27, 1865, and numbered 3,444, [side folio 6] granted for an improvement in musical instruments called a "tremolo attachment"; charged the defendants with having infringed the same; and contained the usual prayer for an injunction and accounting of profits.

The defendants by their answer denied that they had infringed; alleged that the supposed invention had been anticipated by prior use; and above all denied that the complainants had any title to the Reissued Letters Patent on which the bill was brought and expressly called upon the complainants to prove their ownership of the Re-issue they had sued upon, [side folio 12.]

The complainants in taking their proofs put in evidence a different and later patent from the one on which

they brought their bill of complaint, to wit, Reissue No. 3,665, dated October 5th, 1869, [see top of page 9]; and then proved the sale of an organ by defendants in regard to which one witness testified that it was in his opinion constructed in a manner similar to the plaintiff's instruments.

The defendants produced witnesses who testified without contradiction to the use ten years prior to complainants' alleged invention, of devices precisely similar, but made no strenuous defence on the merits of the invention inasmuch as they were confident that complainants had failed to establish a *prima facie* case.

The Court by its findings decided that the Letters Patent No. 3444, on which the bill was brought, had been *surrendered* by the complainants before they had brought their action [side fol. 66] but the Court went on to make the additional finding that the complainants were the owners of Letters Patent 3665, and that *those* Letters Patent were good and valid and had been infringed, and ordered an injunction and an accounting as to said New Letters Patent, which the complainants proceeded to enforce.

The bill of complainant *was not at that time amended* so as to recite the new reissue No. 3665, nor was any such amendment asked for; but on the coming in of the master's report the complainants applied for judgment against the defendants.

The defendants, by their counsel, upon the motion for judgment, protested and objected to the entry of judgment against them because (among other things) the proofs showed that the complainants had no title to the patent on which the bill was founded [see side folio 227] but the Court refused to listen to any argument on the point and ordered judgment for the complainants [see pp. 92–93.]

The defendants appealed, their bonds were given and citation granted and served on the complainants, and then, after the record had been ordered to the Supreme

Court, the complainants applied to have the bill of complaint amended by inserting in it a declaration on the re-issued letters patent which were decreed to be valid, and the District Judge made an order (which is found on page 102) containing a recitation of alleged facts to authorize the order amending the bill as prayed for.

It is important to notice that there was no pretence that the bill of complaint *ever contained* the allegation as to reissue 3665, *prior to the judgment*. The motion and the order were not made to restore the bill to any pretended original condition but were made "to *conform* the bill to the proofs."

It was not the case of restoration of a record, but it was an amendment of substance.

Points for Defendant and Appellants.

The defendants do not come into this Court asking for a decision upon the validity of the complainants' invention as secured by the patent No. 3665. Their record and proofs are not calculated to try the merits of the patent and they desire not to prejudice the future consideration by this Court of the said patent when it shall come before the Court on a record calculated to test the merits of the alleged invention.

But the judgment of the Court below should be reversed on account of errors hereinafter assigned.

I.

The bill charges infringement of Letters Patent No. 3,444 and seeks to recover for the infringement of that patent. The finding of the Court is that "said Patent No. 3444" was surrendered and *new letters patent* issued numbered 3665 [side fol. 66.] This proved the point taken in the answer that the complainants had no title to the reissue set forth in the bill of complaint,

and no recovery could be had for the infringement of a patent not charged in the bill of complaint.

II.

If the point is urged that the bill was afterwards amended, the answer to this point is two-fold.

1. The bill was not really amended.
2. If the action that was taken by the lower Court is considered an amendment, then that action of the Court below is an error sufficient to reverse the judgment.

1. The Supreme Court, in pursuance of an Act of Congress (Act of August 123, 842; Chap. 188; § 6,) have adopted and prescribed certain rules for the Courts of Equity of the United States.

These rules are *obligatory* on the Circuit Courts.

And although the Circuit Courts are by Rule No. 89 allowed to make further rules, yet that permission is accompanied by the restriction that such rules shall be "not inconsistant with the rules hereby prescribed."

Equity Rule 89.

Among the rules prescribed by the Supreme Court is one which provides that if the plaintiff after obtaining leave to amend his bill shall not file his amendments, or his amended bill, in the clerk's office, on or before the next succeeding rule day, he shall be considered to have abandoned the same and the cause shall proceed as if no application for an amendment had been made.

Equity Rule 30.

In this cause although the complainants obtained after judgment *leave* to amend that bill, as appears

by the order at page 102, yet as they did not afterwards comply with rule 30 by *actually filing* an amended bill, they must be held to have abandoned the amendment and for the purpose of this appeal the case stands with the bill not containing the allegation of the reissued patent No. 3666 but only patent 3444, which the Court finds they had surrendered. If they had surrendered it they certainly had no title to it. They could only surrender it by admitting that it was "*invalid* or *inoperative*," (Patent Law of 1836, § 13,) and if "invalid or inoperative" they could have no claim against the defendants for infringement of it even if they had had title.

By the surrender of the patent No. 3,444, the complainants lost all right of action or recovery so far as that patent was concerned. The surrender is a solemn declaration that the patent has no validity.

Moffit v. Garr, 1 Fisher 610.

III.

If it is held that the record before the Court is to be considered as containing an amended bill, setting forth patent reissue No. 3665 then the act of the Court below was erroneous in several vital particulars.

1. The amendment was not an amendment of mere *form*, but was an amendment of substance, inasmuch as a separate and distinct subject matter of litigation was introduced.

2. No matter what the amendment sought, inasmuch as it was sought *after replication*, the complainants were not at liberty to amend except on affidavits reciting among other things that "the matter of the proposed amendment could not with reasonable diligence have been introduced sooner into the bill."

Equity Rule 29.

In the absence of special rules, it is well settled law that a bill in equity can not be amended, after the cause is set down for hearing, in any other respect than by making parties.

Goodwin v. Goodwin, 3 Atk. 370.

In this cause the amendment was not asked for until *after judgment* and appeal, and the defendants were deprived of the absolute right which they had to file an *amended answer* or plea.

Equity Rule No. 46.

The following decisions of the Courts are relied on as sustaining the points contended for by the defendants :

In the case of Walden v. Bodley, this Court say : "There are cases where amendments are permitted at "any stage of the progress of the case ; as where an "essential *party* has been omitted ; but amendments "which change the character of the bill so as to make "substantially a new case, should rarely if ever be ad-"mitted after the cause has been set for hearing, *much* "*less after it has been heard.*"

Walden v. Bodley, 14 Peters, p. 160.

This Court in a subsequent case after reaffirming the foregoing principle in identical language, and after recognizing the necessity of affidavits showing that the matter of the proposed amendment could not with reasonable diligence have been earlier procured and made a portion of the original bill, says :

"Such an essential change * * * proposed too "after an hearing and when it was manifest that the "object of the original bill * * * * no longer ex-"isted, could not have been accorded the plaintiff by "any sound rule of practice.

Snead v. McCoull, 12 Howard, p. 422.

There undoubtedly are cases where amendments have been made to the bill after a hearing, but in every such case the defendant had his rights preserved. He was

allowed the right to *amend his answer* and take new proofs and have the case *re-argued*;—but the courts have never allowed the bill to be amended after judgment and an *appeal* has been taken.

In the case of Smith v. Jackson, the Court say: "When an amendment is made in substance, it must be "while the proceedings are *in fieri* and *before judgment*, "and the Court then does it on such terms as shall be "just and equitable * * * All matters of substance "must be stated in the pleadings; and if stated may "occasion a different verdict from that given when not "stated. Hence whatever is thus essential *can not be* "*cured by verdict nor introduced by way of amendment.* "It is a general and essential rule of law, that all sub- "stantial facts be stated in proper time and place, so "that the other party may know what in substance he "has to answer to and prepare accordingly. Every "material matter be so clearly and directly stated that "the opposite party may put in issue if he pleases."

Smith v. Jackson, 1 Paine C. C. R., p. 490.

Now, in the case at bar, if the bill had been brought on reissue No. 3,665, the defendants had the right to set up as a defence that this second re-issue had been obtained *by fraud;* or that matter had been introduced into the new re-issue which was false and was for the purpose of deceiving the public they had the right to plead purchase from a licensee or release under the *second* re-issue which did not apply to the first re-issue. Under the proceedings in the Court below, the defendants had no opportunity to take any of these defenses to the new letters patent; but the Court *assumed* that the only possible defence the defendants could take was to litigate the question of *novelty*, and that as they had disputed the novelty of the invention of re-issue 3444, the decision was conclusive as to re-issue 3665.

Where a plaintiff's case is amended so as to cover a

defect, it becomes substantially a new suit, and the defendant has a right to interpose a plea.

Donaldson v. Hazer, Hemp. p. 423.

IV.

Even if it is urged that the defendants did litigate the patent No. 3666 on its merits and were not prejudiced by the amendment, the answer is that the record shows no such state of facts. All the proofs taken by the defendants applied to the re-issue No. 3444.

The extraordinary order drawn to amend the bill recites pretended facts, in order to bolster up the judgment, which are without foundation in the record.

That order recites that whereas "re-issue No. 3444 was not put in evidence by the plaintiffs, and that reissue No. 3665 was put in evidence by the plaintiffs without objection," &c.

The defendants were not required to object to the introduction of re-issue No. 3665. By their answer they required the plaintiffs to prove their title to re-issue No. 3444, and when the plaintiffs put in evidence the reissue No. 3665, it proved the defendants case for them because it recited on its face that re-issue No. 3444 had been *surrendered*.

There is no foundation in the record for the recitation contained in the order which amended the bill [see page 102.]

No admissions in the answer can lay the foundation for relief under any head of equity unless it be substantially set forth in the bill.

Johnson v. Ashton, 11 Peters 229.
Knox v. Smith, 4 How. 298.

It does *not appear* "that the testimony in the cause was taken solely with reference to re-issue No. 3665"; the litigation was *not* "solely in reference to re-issue No.

3665 ;" and if the Court erroneously "founded its decision on re-issue No. 3665," it can not prejudice the defendants' rights.

The order amending the bill was a most extraordinary one ; the Supreme Court desires to ascertain the *facts* of a cause from the *record* which comes up to them and not from the *statements* of the counsel or Court below, and for that reason Rule in Equity No. 86 was presented by this Court which says : "In drawing decrees and orders, neither the pleadings nor any other prior proceedings shall be recited *or stated* in the decree or order."

Equity Rule 86.

The defendants' counsel called the attention of the Court below to this rule [see top page 103] and yet in utter disregard thereof and with a desire to support the judgment at all events, the order was drawn as set out at page 102.

V.

There was no waiver by the defendants in the Court below, of any rights to which they were entitled. They raised the same points then that they have done here. They took the objection by answer [side folio 12.] They raised their objections on the motion for judgment, [side folio 227] They took their appeal, and they opposed the motion to amend the bill on the very grounds raised here, [see pages 102 & 103.]

Parties to a civil cause certainly have a right to rely on the rules prescribed by this Court and on the settled practice, and plaintiffs should not be allowed to take advantage of their own errors to the injury of the defendants. All the rights of the plaintiff would have been preserved even on a dismissal of the bill in this case for they could file a new bill but the defendants' remedies are destroyed by the action taken in this case, and they are deprived of a substantial right.

If such a dangerous innovation is allowed as was made in the Court below appeals will be of no avail for upon its becoming apparent that fatal errors exist the Courts below will be invoked to sustain their judgments in a way that will render a just appeal an additional burden on a suitor who has properly taken it.

VI.

The judgment should be reversed and the case remanded to the Court below with instructions to dismiss the bill.

B. E. VALENTINE,
Counsel for Defendants and Appellants.

U. S. Supreme Court.

ALONZO HITCHCOCK, *et al.*,
Appellants,

vs.

CHARLES M. TREMAINE, *et al.*,
Respondents.

Respdt's Brief on Cross Appeal.

Abstract of Case on Cross Appeal.

The complainants in the Court below although they recovered judgment, appealed from the decision of the Circuit Court which reduced the amount of the recovery.

The infringing device was a tremolo attachment. It was only a portion of the whole instrument the sale of which constituted the defendants' business. The Master on accounting in the Court below, at first rendered a report against the defendants for the difference between the purchasing price of this device and the selling price, without estimating as part of the cost price a proportionate part of the general expenses of the business. The Court by a decision reported in the 9 Blatchford, p. 385, held that the tremolo attachments should be charged with a proportionate part of the general expenses of the business in estimating what the cost price was. The Master made a second report in conformity with that decision, and the plaintiffs appeal from that branch of the case.

POINTS FOR RESPONDENTS.

The appeal in this cause was taken before the rule of this Court which requires the opinion of the Court below to be inserted in the record that comes up upon appeal, but it is reported in full in

Hitchcock v. Tremaine, 9 Blatchford, p. 385.

The respondents on this cross-appeal refer to that opinion as conclusively stating all the law so far as this cross-appeal is concerned. If the plaintiffs are entitled to recover anything at all against the defendants then the amount finally reported by the Master and confirmed by the Court below is correct. The defendants do not wish to dispute the propriety of the amount found due, if anything, but claim that the defendants were entitled to judgment absolute dismissing the bill.

B. E. VALENTINE,

Counsel for Respondents on Cross-Appeal.

Supreme Court of the United States,

ON APPEAL FROM THE

CIRCUIT COURT OF THE UNITED STATES,

FOR THE SOUTHERN DISTRICT OF NEW YORK.

ALONZO HITCHCOCK, GEORGE G. SAXE and JAMES H. ROBERTSON,

against

CHARLES M. TREMAINE and WILLIAM B. TREMAINE.

STATEMENT OF CASE IN APPEALS, Nos. 398. 399.

Assignment of Alleged Errors in Appeal, No. 398.

Points on behalf of Complainants.

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1874.

S. Hamilton's Sons, Printers, 61 Cedar St., N. Y.

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Supreme Court of the United States.

ON APPEAL FROM THE

CIRCUIT COURT OF THE UNITED STATES, 2

FOR THE

SOUTHERN DISTRICT OF NEW YORK.

ALONZO HITCHCOCK, *et al.*,

against

CHARLES M. TREMAINE, *et al.*

STATEMENT OF FACTS. 3

The Bill in this Cause was filed to prevent the infringement of certain re-issued Letters Patent of the United States, granted to the complainants, as assignees of one R. W. Carpenter, on the 5th of October, 1869, No. 3,665, for a "tremolo attachment" to musical instruments.

The Bill charges infringement of said re-issued Patent by the defendants, who are dealers in musical instruments.

4 The answer denies the novelty and validity of the Patent, and the infringement thereof by the defendant.

Note.—The bill, as printed in the record, and as it now appears omits the allegations of the surrender and re-issue of the complainants' Patent on October 5, 1869, and on its face appears to be a bill against infringement of re-issue, 3,444, dated, May 18, 1869.

The Court, in the exercise of its undoubted power to correct its own records at any time, especially under the peculiar circumstances under which the allegation as to the re-issue of October 5, 1879, seemed to be missing, amended the bill so as to conform to the fact and the proof (Record 102).

The case was brought to a final hearing before his Honor Judge Blatchford, in October Term, 1870, and a decision rendered in favor of the complainants. A decree
5 was entered referring the cause to a master to take and state the amount of profits. A report was made; exceptions were filed by the defendants, and the report was referred back with instructions. A new report was made, both parties filed exceptions; all exceptions were overruled, and the report confirmed. A final decree was entered, and from such decree appeals were taken. From the whole decree by the defendants; from so much of the decree as overruled the complainant's exceptions to the master's report, by the complainants.

6

7

Statement of Errors of the Circuit Court, suggested by Complainant's and Appellants in Appeal No. 399.

1. The Court erred in directing the master to permit the defendants to prove any of the general expenses of their business incurred alike to effect the sale of all goods, and to deduct a portion thereof from the profits made by them by their infringement.

2. The Court erred in confirming the master's report of 8
April 17, 1872, the proofs showing that no part of such "general expenses" were justly allowable to detendant's appelles.

3. The Court erred in allowing to be apportioned as general expenses and crediting a part thereof to the defendants, against the said infringement, the following items:

1st. Stationery and Printing - -	$1,405.28
2nd. Telegraphing - - -	47.28
3rd. Office furniture and fixtures -	239.35
4th. Expressage - - -	28.12
5th. Labor - - - - -	79.30

which ought not to have been credited to defendants or taken into account, because defendants did not prove 9
what part, if any, of said expenses were allowable under the order of February 28, 1872.

4. The Court erred in overruling the complainant's exceptions to the master's report of April 17, 1872.

5. The Court erred in not granting and decreeing to the complainants, appellants, the relief as prayed in the bill.

Points on behalf of Respondents in appeal No. 398 and Appellants in appeal No. 399.

FIRST POINT.

THE CONSTRUCTION OF THE COMPLAINANTS' PATENT.

The subject matter of the Patent, is stated to be "a new and useful improvement, *in musical instruments*, called a tremolo attachment."

[Preamble of Patent.]

It is stated, that prior to the invention of the Patentee, the nearest approach to the production of what is called a "tremolo note," in a musical in-
11 strument, had been made by the action of various species of "valves," hung either in the trunk or "wind chest," or "in the air passage."

The action of a valve, vibrating so as rapidly to open and close the passage of air through the reeds, "breaks as it were, the note into a number of parts."

In other words, it merely produces a rapid reiteration of the note.

This method was necessarily imperfect. "The "tremolo was produced at a sacrifice of the *fulness*, "*power and smoothness* of the musical note." "For," says the specification of the complainants' Patent, "it is obvious that during that portion of the
12 "action of the valve, when the air passage was most "contracted, the note *must be* less smooth, full and "powerful, than when the passage is most fully "open." (See Patent.)

"This will be at once perceived by the ear, (continues "the specification,) in listening to the tremolo produced "by alternately opening and closing an air passage, by "means of a valve. The pulsations are sudden, distinct "and harsh, and are more like blows than undulations."

This old and imperfect mode of production of a tremolo in musical instruments is quite clearly shown in the

patent to Lafayette Louis, dated November 18th, 1856, No. 16,094, which was put in evidence by the defendants to show the state of the art prior to the complainants' patent.

Mr. Louis' invention consisted in applying to the melodeon a long *valve*, or two *valves*, partially covering the reeds.

If two valves were used, "one valve was placed over "the treble reeds, and the other over the bass reeds."

These valves it was proposed to rapidly open and close by a connection from a small fan wheel driven by air from the bellows.

"In order to produce the tremolo, a vibratory move- "ment is given to the treble valve, or to both valves at "once, whereby the force of the air passing downwards "through the reeds is *varied*." (Louis Patent.)

Mr. Louis claims as his invention, "the use of a long "*valve* or *valves* placed *over* the reeds and under the "swell, and vibrated in such a manner by any proper "arrangement of mechanical devices *as to break and* "*vary the force of the air passing through the reeds*, "thereby producing a sound similar to the tremolo" in a human voice. (Louis' Patent, first claim.)

This is a clear illustration of one of the methods of "breaking the note into a number of parts," thereby producing a resemblance to a tremolo, but "at the sacrifice of fullness, power and smothness."

Such was the state of the art prior to the invention of the complainants' assignor.

This invention was a step in an entirely new direction.

"By this invention," says the patentees, "an entirely new principle is introduced in the production of the tremolo."

"The principle of the invention consists in imparting a "common agitation to the air, in which the musical "sounds are produced in such a manner as to give rise "to a tremolo, *without checking the flow of the air* "*through the pipe mouths or reeds*."

"The method in which we apply the principle of ex-

16 "ternal agitation to the production of the tremolo, con-
"sists in the introduction of a revolving or swinging fan
"vane or beater into the instrument in such a position
"that when it is put in motion by a treadle, or other
"suitable means, the blows upon the air of the rapidly
"moving fan impart to the notes *without imparing their*
"*continuity*, a tremulousness that is very similar to the
"tremolo of the voice."

The patentees then describe the construction of this rotating fan, and the method of its practical application to a musical instrument.

They state that the *particular means* for rotating it are no essential part of their invention, as it may be moved "by a double connection with the pedal or any
17 other *suitable* means of operation."

They then sum up the invention to which they lay claim as follows :

1st. The application of means to the instrument by which the air may be agitated to produce a tremolous note, *as described.*

This claim, viewed in the light of the specification, means nothing more or less than this.

"Combining with a musical instrument an *external*
"rotating fan, or other equivalent device for producing
"a tremolo *without breaking the current of air through*
"*the reeds*, said fan being put in motion by a treadle or
"other *suitable* practical means of operation."

18 The second claim is as follows :

"The arrangement of a fan, or agitator, in the instru-
"ment at right angles to the keys and parallel to the line
"of reeds or pipe mouths, at any convenient distance
"from them, as described."

This claim covers a special arrangement of the fan described, and one which is found most convenient in practice, and is almost universally adopted.

Such then is the proper construction of the complainants' patent.

It claims, first, a combination with a musical instrument, or an "application to the instrument" of "means "as described," consisting of a rotary fan, or other equivalent device, "put in motion by a treadle or other "suitable means of operation." 19

It will be noticed that in order to constitute a "*suitable*" means of operation, such means must be *within the control of the person playing upon the instrument*, in order that the effect may be produced at will, "in "playing passages when the tremolo may be desired." (See patent.)

Such operative connection is essential to give the tremolo attachment any practical utility.

The Patent also claims the arrangement of the fan described at right angles to the keys, and parallel to the line of reeds or pipe mouths, and at any convenient distance from them. 20

This special arrangement of the fan is one of great convenience; it enables it to "operate simultaneously upon all the notes of the organ, or instrument;" or upon so many of them as it is placed parallel to.

SECOND POINT.

The second question to be considered is whether the defendants have infringed the complainants' Patent.

The proof is that on November 30, 1869, the defendants sold to Hiram D. Opdyke two organs (Exhibit B and C), with tremolo attachments thereto applied. (Complainants' evidence, p. 16, fol. 42). 21

At the same time the defendants had in their possession and were offering for sale, a considerable number of organs of the same kind, with the tremolo attachment. (Complainants' evidence, p. 18, fols. 48, 49).

One of these organs (Exhibit B, with its attachment), is known as the Burdett Organ, manufactured by Burdett of Chicago, Ill.; the other (Exhibit C), bears the

22 name of the defendants, but is, we believe, manufactured by the Shoninger Organ Co. of New Haven, Conn.

The proofs are clear by two witnesses, that both of these tremolo attachments are substantially similar to that of the complainants.

Opdyke's evidence, p. 16, *fol.* 43-4).
Fuller's evidence, pp. 23-5).

This evidence is *entirely uncontradicted* by the defendants; they have not called a single expert, or witness, to show that either or both of said organs, with their attachments, do not infringe.

In the absence of all evidence for the defendants, the Court will not find that they do not infringe.

But aside from the evidence of witnesses, we have the more certain testimony of the infringing mechanism
23 itself

Exhibit C is, of course, a clear and palpable infringement, and there is no contest in relation to it.

Whether Exhibit B is an infringement or not is the only point hinted at by the defendants.

In Exhibit B the tremolo is produced by a rotating cylinder having two portions cut away on opposite sides.

On the part of the complainants it is insisted that this is merely a different *form* of "fan or beater" from the Patentees; that the rapid vibration of any irregular body will produce the same effect in a musical instrument, and the same kind of tremulous note as is produced by the
24 complainants' "fan." The *degree* of effect produced will correspond to the extent and form of the *irregularity* of the revolving body.

There can be no question but that this is a correct position.

Nor can there be any question but that the rotating cylinder of the Burdett Organ (Exhibit B) does, by its irregular form, produce just the same effect upon the air and upon the musical note as is produced by complainants' fan.

This is shown by placing the revolving cylinder at some 25
distance from the reeds, when the effect produced cannot be produced by any valve action, but must be produced in same way as by complainants' fan. (Complainants evidence, p. 24, q. 29).

But it may be contended by the defendants that though the revolution of the cylinder, from its irregularity will, as a matter of course, produce by its agitation a tremolo, yet that *as* the defendants and the manufacturers of the organs have *placed* it, it operates solely as a rotating valve, or cut-off in the current of air passing to the reeds ; that, therefore, it partakes of the character of the valve tremolo, in use prior to the complainants patent, and does not act upon the patented principle. It 26
will be noticed, however, that the defendants do not locate their cylinder in the air-passage to the reeds where it is shown in the patent (Exhibit No. 6), but have taken it out from the position where only it could act as a valve, and have placed it in the same position as the complainants' tremolo where only it can act as a "fan." The claim that the Burdett tremolo is a "valve" is, therefore, founded wholly upon a false understanding of the operation of Exhibit E.

It is shown by the *uncontradicted* testimony of the complainants' witness Fuller. to be erroneous. (Complainants' evidence, p. 24, q. 26). 27

It is disproved by the fact that the rotating cylinder never intercepts air flowing to the reeds, but is situated outside the swell, where it can only act as a fan.

It is disproved by the fact that the effect is the same when the passage of air through the cylinder is closed by a partition. (Complainants' evidence, p. 13, q. 27.)

By the fact that the same effect is produced by Exhibits G, H and J. (Complainant's evidence, p. 14, q. 34.)

And conclusively by the experiment detailed by Mr. Fuller's answer to question 32. (Complainants' evidence, p. 13.

28 In this experiment it is shown that the tremolo produced by the rotation of the cylinder is scarcely heard, if at all, when a large intercepting medium is placed between the instrument and the ear; *although the note is distinct*, whereas, if the tremolo was caused by *breaking up the note* by a valve, the *breaks* in the note would be equally perceptible with the note itself, in any position of the hearer. (See experiment.)

There is, therefore, no foundation for the pretence of the defendants, that the Burdett tremolo acts as a valve, or cut-off, and not as an "external fan," which produces the tremolo, without breaking the current or note.

This revolving cylinder being then a plain equivalent
29 of the complainant's fan, and it being combined with a musical instrument, and actuated by suitable practical means, within the control of the operator, (viz., a wind wheel, driven by the bellows, and controlled by a stop), it is a clear infringement of the first claim of the complainant's patent.

And in as much as it is placed in the instrument, "at "right angles to the keys, and parallel to the line of "reeds," it is a clear infringement of the second claim.

Both Exhibits B and C, therefore, infringe *both* of the claims.

THIRD POINT.

30 The next point to be determined is, whether the complainant's patent is valid.

The evidence on this point is of two kinds.

1st. The Patent of Lafayette Louis, dated Nov. 18th, 1856, No. 16,094.

2d. The testimony of William Karr, Samuel S. Thatcher, and William Thatcher.

1st. The Louis Patent we have already considered, and it appears to have been one of the very things which the patentees disclaimed as operating upon an entirely distinct principle from their invention.

It was a "*valve* tremolo," breaking up the current 31
of air through the reeds, and producing a mere rapid reiteration of the note.

The only thing in the whole patent, which bears the slightest resemblance to the complainants' invention, is a single phrase, as follows: "In order to produce the "tremolo, a vibratory movement is given to the treble "valve, or to both valves at once, whereby the force of "air passing downwards through the reeds is varied, or "an agitation in the current produced."

But this has no relevancy to the complainants' invention.

"The agitation in the current" is nothing more nor less than "the varying the force of the air," which cur- 32
rent, in the words of the first claim, the "mechanical devices," "break and vary," while "passing through the reeds."

In the Louis Patent, the air can only be "agitated" *by breaking the current*, for the valve does not "beat" upon it; it is merely lifted by the cord from the wind wheel, and is then free to fall, or be drawn back to its closed position by the current of air.

The Louis Patent, besides being essentially dissimilar to the complainants' tremolo, is an entirely impractical device (complainants' evidence, pp. 11, 12, 15), as is proved by the witness Fuller, whom the defendants have not attempted to contradict.

33

2d. The only remaining evidence on the question of novelty, is that of the witness Karr and the two Thatchers.

It appears that about 1855 William Karr made a fan as an experiment (defendants' evidence, p. 17, 18, q. 5 to 10), and took it to Brass Castle, New Jersey, where it was for not more than three or four *hours* (p. 21, q. 61, sec. 42), placed upon a melodeon, and its effect tried, by winding a string round the shaft and pulling it off by the hand of a person who stood at the side of the person playing on the instrument (p. 21, q. 58 to 62). It was

34 then taken home by Karr (p. 21, q. 62), never applied to any other instrument (p. 22, q. 71), laid aside (p. 22, q. 72), *abandoned* (p. 23, q. 88), and *destroyed.* (See Exhibit No. 1, and p. 18, q 13. p. 23, q. 80.)

After Karr got home to the little village of Karsville, New Jersey, he is said to have made one fan of different construction.

This fan is attempted to be described in answer to question 37, and in the drawing, complainants' Exhibit F.

Nothing more was ever done with this fan than trying the experiment in the same way as with the first fan upon a rude contrivance put in evidence as Exhibit E. (p. 23, q. 86, p. 24, q. 99). This fan is *lost.* (p. 23, q. 92).

35 Karr himself admits that his use of the fans *was nothing more than an experiment* (p. 22, q. 65), which he himself *never regarded as a perfect invention* (p. 23, q. 90, 91), and *abandoned* in a short time. (pp. 23, 99, 88-9.)

His whole testimony is marked by uncertainty as to the construction of the devices with which he tried the experiment: (55, 56, 57, 67, 69, 84, 103): he himself has *forgotten what he did.*

The next evidence is that of Samuel and William Thatcher. These men are brothers, and testify to the same transaction.

All the knowledge that they have was derived, in the 36 first place, from the brief experiment of Karr, at Smith & White's factory, at which they were workmen. (28, q. 162).

It is said that two or three weeks after Karr's experiment, (p. 29, qq. 163, 164, 165), Samuel Thatcher made *two* fans, (p. 29, q. 170), *one* of which he thinks was of a form to be practical as a tremolo attachment. (p. 29, q. 167, 168).

This fan was, however, *never practically combined* with a musical instrument.

The only motive power was a string wound round the shaft, which was drawn off by a person standing by the 37
instrument, or by one hand of the player, (p. 32, q. 212, 213), or by a pedal, (p. 30, q. 184, p. 31, q. 198), or by a weight, which would quickly run down, and then had to be wound up again, (p. 30, q. 180, 181, 182, 183).

The witness William Thatcher frankly admits that the trial was a mere experiment (p. 32, q. 214), afterwards given up (p. 32, q. 219, 220); and Samuel Thatcher can only say, "*I think* we had the running of this fan *either* the one way with the weight *or* with the last attachment (the pedal," but admits that he cannot recollect how it was constructed, (qq. 197, 198, 199, 200, 201), and that after a week's trial he "got *disgusted with it*," as did Mr. Smith, in whose employ be was, (p. 38
30, q. 185), who gave orders to "*pitch the thing out the window*," after which experiments, for a week in 1855, "*there was no other attempt made to apply the fans*," (p. 30, q. 186), and they were destroyed as things of "no value or importance, (p. 30, q. 188).

The witness never again saw a fan tremolo until two years ago upon a organ of the complainants' licensees, (p. 30, q. 191).

The proofs on this head disclose one of the clearest cases of an abandoned experiment, of which the public derived no knowledge, and from which they drew no benefit whatever. 39

Karr indeed says that the *fan* was seen by many persons (p. 25, q. 113), though he cannot name *any one.* and that he sometimes explained its uses, (p. 25, q. 114), but it does not appear that it was *ever seen applied* even to the rude instrument on which it was used, and if it was, he himself admits that that was not a *practical application.*

So, too, Samuel Thatcher says, that during the week of experiment the fans "were not kept secret," and that he "*supposed* they were seen," but he, too, having failed to show that there was any *practical application*

40 of the fan to a musical instrument, of course no such practical application can have been seen.

The best and *conclusive proof*, however, that the public acquired no knowledge of the complainants' invention from the abandoned experiment of Karr and the Thatchers, is found in the fact that from 1855, the date of the experiment, to 1865, the date of the original patent, *not a single instrument is shown to have been made with the tremolo attachment.* Whereas, *since* the invention of the complainants, the attachment has gone into extensive use.

Poillon v. *Schmidt*, 6 *Blatch.*, 299.
Sayles v. *Chicago & N. W. R.*, *R.* 4 *Fitch*, 587.

41 Recurring now to the substance of the Patentees invention, it is perfectly apparent that it is not anticipated by the proof of the Karr and Thatcher experiment.

The Patent is for "combining with a musical instru-"ment, a rotating fan, or other equivalent device, said "fan being put in motion by a treadle or other *suitable*, "*practical* means of operation."

It is evident that the Karr and Thatcher experiments did not anticipate this.

Their fan was not "*combined* with a musical instrument or put in motion by any *suitable* or *practicable* means of operation.

42 Temporarily placing one instrument upon another, *without suitable* connections, so that they can *operate together*, to produce the designed effect, is not a "combination," but a mere juxtaposition of parts; without *suitable, practical* means to rotate the fan at the will of the operator, there is no "*application* of means to the instrument as described," which is the substance of the first claim.

Nor unless the fan is practically *applied* to or combined with the instrument can it form the particular "arrangement," "as described" in the second claim of the Patent.

But besides all this, inasmuch as the attempted application of the fan tremolo, was but a temporary *experiment*, admitted to have been incomplete, and afterwards *abandoned*, and one from which the public desired no knowledge or benefit, and which lay *forgotten* for *ten years*, until the inventor in this case reinvented and carried it into practice, it is the well-settled rule that it can not invalidate the complainants' subsequent patent. 43

Such experiments do not impair the benefit which the Patentee imparts to the public, in return for the public grant; the *new item of practical knowledge* which is given to the public by the patent, was unpossssed by them before, the grant rests consideration.

Gaylor vs. *Wilder*, 10 *How.*, 477, 44
Bird vs. *Hall*, 3 *Fisher*, 595.
Poillon vs. *Hardick, Eastern Dist., N.Y., Jan.*, 1871.
Hartshorn vs. *Tripp, S. D., N.Y., Dec.*, 1869.
Cahoon vs. *Ring*, 1 *Cliff.*, 592, 511, 612.
Merrill vs. *Atwood, Patent Com's., Dec.*, 1869, *p.* 6.

FOURTH POINT.

We now come to the question of the profits realized by the defendants, by means of the infringement in question. 45

To properly estimate this, regard must be had to the nature of the improvement in question, and the character of the business of the defendants in dealing with it.

1st. The improvement in question is not the "fan" by itself, but it is the combination of the "fan" with the organ, in a specified location and relation. "The *application* of means to the instrument as described." Neither the fan or the organ could be patented by itself. Both a fan and an organ were old, but the operative *connection* or *combination* of the two was new.

46 2d. The character of the business of the defendants in relation to the infringing mechanism is noteworthy.

The business of defendants is a general one. "The sale of musical instruments, including organs and melodeons" (p. 70). Among other instruments, (pianos, &c.,) the defendants were, at the time of the commencement of the suit, and for some time subsequently, dealing in the Burdett & Shoninger organs.

These organs were made by the manufacturers, both *with* and *without* the tremolo fans.

Of course the organs were entirely complete without the tremolo, and it was optional whether the defendants procured it for sale or not. In case the tremolo combination was purchased an extra price was charged for it. In regard to the Burdett organ, Tremaine says, (p. 74): "We had two different arrangements, one as to organs
47 "with the tremolo, and one as to organs without, the "organs with the tremolo were to be charged $12.50 "extra."

Or to explain more fully, the defendants purchased organs with and without tremolos of the general agents for the Burdett organs at (in general) fifty per cent. discount from the retail prices, and as the retail price of organs having the tremolo combination was $25.00 more than the same organ without such combination, the defendants only paid $12.50 additional in each case for the additional advantage of each tremolo.

In the same way they purchased the Shoninger organs
48 at 50 per cent. discount from retail prices, and as the cost of organs with the tremolo was ten dollars more than the same style without, they paid for each tremolo combination $5.00 additional to the price of the organ without it.

Purchasing in this manner they then sold the organs at the retail prices, or at the retail prices with such discounts as they allowed to their customers, receiving in each case in which they *choose* to infringe the complainants patent by purchasing and selling an organ with the tremolo, a profit, *additional* to the profit on the organ

alone, exactly equal to the difference between what the addition of the tremolo cost them, and the enhanced price they received by reason of its presence. 49

The particular prices paid and received for organs and tremolos in each case are fully detailed in the tables, p. 56 and 61 to 66.

The second point to be observed is that the whole business of the defendants was one conducted not at a loss, but at a profit.

There was not only a profit arising out of the addition of the tremolo, and the enhanced price received for it, but there was also a profit of much larger amount beyond and besides this on the organs themselves and other instruments. (See summary, p. 84.) 50

The next point to notice is that the addition of the tremolo combination undoubtedly contributed very largely to the sales of the organs, *i. e.*, many more were sold by reason of the presence of the infringing combination than would otherwise have been the case.

This is proved as a matter of opinion by persons conversant with the trade.

Mr. Saxe's evidence, p. 179.

Mr. Sherwins' evidence, p. 190 and 199.

and is not denied by the defendants.

Tremaine merely says, (p. 84): 51

"I do not think that 50 per cent. of the sales of the "Burdett organ are due to this tremolo; that is not the "feature of the Burdett organ."

Indeed. in the defendants business circular, (p. 47, fol. 105) the addition of the tremolo is specified as the "most important of all improvements"

Bearing these facts in mind, we can now approach the mode of estimating the profits followed by the master.

The master in his first report credited the defendant with the cost of the tremolos in addition to that of the

52 organs, and charged them with the net sum received, deducting all commissions, &c.

He refused to charge against the extra sum received by reason of the addition of the tremolo any part of the general expenses of the business, such as rent, clerk hire and gas, unless the same were shown to have been in some way increased by, or chargable to, the fact of the addition to the tremolo. For it was not pretended that the addition of the tremolo caused any increase whatever in expenses, other than its cost price.

His mode of arriving at the profits made by the defendants by buying and selling organs with tremolos may be illustrated by the following figures taken as exam-

53 ples:

Cost of organ without Tremolo.	Cost of Tremolo.	Cost of Combination.
$100	$12.50	$112.50
Received for Organ.	Received for Tremolo.for	Received Combination.
$200	$25	$225

Proft on combination over and above profits on organ alone, $12.50.

From this was deducted all commissions for selling.

Now the defendants claim that they are entitled to deduct from their profits on this combination a certain amount of their "general" expenses, proportioned to

54 the amount of sales of tremolos.

Thus, suppose the gross sales amounted to $200,000; gross amount of extra price for addition of tremolos, $5,000; gross general expenses, $50,000.

The defendants then say, our general expenses amounted to 25 per cent. of our sales. On every organ which we sold for $200, we paid $50 in general expenses. Now when we add a tremolo, and receive $25 more, we incur, it is true, no additional expense except the cost, $12.50; but we desire to take off from the general expenses due the organ $6.25, and charge that as a proportionate amount against the tremolo, leaving thereon a profit of

only $6.25. The master refused to allow this (see first report), but the Court below differed fromt he master, and permitted it (see second report), and the complainants excepted. 55

1st EXCEPTION :

The complainants, excepting to the said second report of said master, say that said master has erred in that he allowed the defendants to prove any of the general expenses of their business, incurred alike to effect the sales of all goods, and has deducted a portion thereof from the profits made by them by their infringement.

This exception is taken: 56

1*st. Because the complainants conceive that the Honorable Court erred in and by the direction given to the master on that subject, in and by the order of February* 28*th*, 1872.

2*d. Because the proofs now show that no part of such general expenses are justly allowable to the defendants.*

This method of computation of profits was clearly erroneous.

It is based on the error of forgetting that the patent is not for the tremolo itself, but for the *combination* of the organ and tremolo.

If an extra price is received for the combination, without any additional expense being incurred, the whole of 57 that extra price is obtained by the addition of the combination.

It does not avail the defendants to charge a portion of their general expenses against the tremolo, one member of the combination, for in so doing they take off the exact amount from the other member, the organ. The profit on the whole combination is still equal to the exact amount by which the extra price received by reason of the making of the addition exceeds the amount received for the organ alone. This is expressed in figures, thus:

58 Cost of organ, $100; received for organ, $200. Cost of tremolo, $12.50; received for tremolo, $25. Amount of general expenses apportioned to each organ, $50; no additional amount incurred by reason of tremolo.

If all, $50 is charged against organ alone. Profit on tremolo alone is $12.50. If $45 is charged on organ and $5 on tremolo, we still have $12.50 as the profit received *for the combination; i. e.*, $7.50 on tremolo itself and $5 on organ, *by reason of adding tremolo.* The same result follows from any apportionment.

Any other rule than this would enable an infringer to add patented devices to his instrument, charge extra prices for them, and thereby increase his profit on his instruments by the exact amount of the proportion of his
59 general expenses that his sales of the infringing device bear to his general business.

In other words, the more he infringes the more of the general expenses he diverts from the main instrument, and thereby the more profits he makes without being accountable for it.

The true rule is: If the infringing devices is an integral part of the whole instrument, without which it is incapable of use, and for which a single charge is made, then in determining profits on a part of the organization general expenses are to be apportioned according to cost, or by some other equitable rule.

But when the infringing device is an *optional* one, used or not at pleasure, and an extra price is charged
60 and received for it when used, the true profit made is the extra sum received for the *addition*, only such expenses being allowed as are incurred by reason of the addition. If this rule is adopted, as it must be in all fairness, the *first report of the master was correct*, awarding the complainants $1,233.84, (See p. 58), and it is submitted that the decree should be modified so as to award that sum with interest from that date.

The objection to this rule urged in the Court below, and adverted to in the opinion of the Circuit Court, was that "*non constat*, that if the organ sold had not con-

tained such attachment, it would have been sold at all." 61

Hence it was urged that as the tremolos induced the sale of organs, and as the sale of organs involved expense, therefore the tremolo must bear its proportionate of such expense. This is a plausible position, but it appears that the sales of organs produced a profit (p. 84) beyond the profit on the tremolo. Every sale of an organ which was induced by the presence of a tremolo, instead of creating an expense which lessened that part of the profit measured by the difference between the cost and sale price of the tremolo, not only wholly paid such expense, but added additional profit for the organ. If it be the fact, as it doubtless was, that the presence of the tremolo combination increased the sales of organs, so far 62 from the tremolo combination being charged with anything on that account, it ought to be credited, not only with the difference between its cost and sale price, but also with the additional net profit on the whole instrument whose sale was thereby effected.

McCormick *vs.* Seymour, 3 Blatch., 225.
Seymour *vs.* McCormick, 19 How., 96.
Whitney *vs.* Mowrey, 4 Fish., 145.
Carter *vs.* Baker, id., 404.

If it would have been impossible to have sold any organs without the tremolo, the whole net profit would 63 have been properly credited to the tremolo.

If half the sales were due to the tremolo combination, to the tremolo is due the profit caused by its own extra price plus one-half of the balance of net profit on the whole instrument, and if the addition of the combination produced no effects, yet still in fairness it ought to be credited with its own *extra* profit, and not charged with any part of expenses it contributed nothing to incur.

The contingency of the presence of the tremolo having retarded sales is not supposable under the proofs (74–79) but if it were, it should still be credited with its own profit, and charged with any loss on sales of the whole instrument.

64 Or to state the matter in reverse order. If the same number of organs would have been sold whether the tremolo was put on or not, the addition of such tremolo gave to the defendants an additional profit which is exactly measured by the difference between the cost and sale price of the tremolo.

If it increased the sales of organs, it should be credited with this, its own profit, and with such proportion of the general profit as it occasioned. (See cases above cited.)

The master in his first report (57) proceeded on the theory the most favorable to the defendants, to wit: That the combination of the tremolo with the organ had *no* effect on the sales of the organs, but they would have
65 been the same with or without it, and merely charged the defendants with the additional profit they received by reason of adding the infringing tremolo.

With this method of proceeding the defendants ought not to have complained, for it did not charge them with any of the general profit on the main instrument alone, much of which had doubtless been occasioned by the addition of the tremolo.

It is respectfully submitted that no more favorable report to the defendants ought to have been made, and that no less justice to the complainants should be done than the confirmation of this report

66 If, however, this Court should be of opinion that the first report of the master was incorrect, and the direction of the Court below contained in the order of February 28th, 1872, proper, then we submit that such directions were not in all respects correctly followed. This brings us to the second exception of the second report.

2nd. EXCEPTION:

"*The complainants, further excepting, say, that "the said Master, in and by said report, erred in "that he has allowed as part of the expenses of bus- "iness, to be apportioned as general expenses, and*

" has credited a part thereof to the defendants, against 67
" the said infringement, the following items:

" 1st. Stationery and Printing, - -	$1,405 28
" 2nd. Telegraphing, - - - -	47 28
" 3rd. Office furniture and fixtures, - -	239 35
" 4th. Expenses, - - - - - -	28 12
" 5th. Labor, - - - - - - -	79 30

" Whereas said master ought not to have credited " the defendants, or taken into the account any portion " of said sums, because said defendants did not prove " what part, if any, of said expenses were allowable " under said order of Febrnary 28th."

If a proportion of the general expenses are to be de- 68
ducted, then the defendants must bring themselves within the order of the Court dated February 28th, (1872), and, in regard to that order, the following things are to be noted :

1st. A division of expenses is to be made into " general" and " particular."

The " general" expenses bring those incurred for *all* goods alike such as rent, clerk hire, general advertising, &c., the particular expenses being those caused by certain particular goods, and not by reason of selling all the goods, such as cartage on particular instruments, commission of particular sales, &c.

2nd. The burden of distinguishing between these two 69
classes is upon the defendants.

The defendants, by the order, were to be "*permitted*" to prove their "*general*" expenses, as distinguished from the particular ones. Unless they showed, therefore, what their "general" expenses were as distinguished from "particular" ones, the Master had nothing to do but to report as before.

This was a salutary rule to place the burden of proof in this respect upon the defendants; to them only were the facts known, and it was just and proper that they, and not the complainants, should be required to prove

70 them, and bring themselves within the rule laid down by the Court.

It is upon this theory that the second of the plaintiffs exceptions is founded.

The defendants show generally that they had incurred certain items of expense—*i. e*, stationery, printing, telegraphing, expressage, labor, &c.

Now each and all of these items may be items of general expense, or they may be particular expense, or they may be part one and part the other.

The defendants have failed to show what part of these expenses is "general" and what part "particular," they have failed to do this, and, therefore, the items should be disallowed.

The Master adopted this principle in respect to trav-
71 elling expenses, tuning, repairing, &c., and it is not perceived how the items excepted to by the plaintiffs differed in position from many of those disallowed.

There is an additional reason why the item of office furniture and fixtures should be disallowed.

That item is offset by the existence of the articles themselves. The defendant might, perhaps, have been allowed wear and tear of the furniture, but it is not possible that they can be entitled to deduct the furniture from the profits, *and yet have it.*

The complainants contend, therefore, that the first ex-
72 ception should be allowed.

1st. Because the infringement was not in itself of a character to be charged with any part of the general expenses.

It was an optional addition to the organ which added nothing to the general expenses, but added precisely the excess of its price over its cost to the profits of the defendants.

2nd. Because, it has been shown that the large business of the defendant is, in a great measure, due to

the fact of their infringement, the infringement added 73
to the general profits of their business, and greatly increased the means of the defendants to pay their general expenses. Instead of contributing to the expense of the business, it, besides its own peculiar profit, gave increased profits in the other departments.

The second exception should be allowed, because if "general" expenses are to be allowed at all, the defendants must show that the expenses so claimed are "general."

If the first exception is allowed the report of themaster should be modified so as to award $1,238.48, as upon the first report

If the second exception is allowed, the report of the 74
master should be modified so as to make the following proportion, viz: $91,165.32 : $3,913.96 : $15,069.60 : $659.34. This amount, deducted from $1,238.48, gives $549 as the correct amount of profits.

FIFTH POINT.

If we turn now to the exceptions to the Master's Report, filed by the defendants, it will be almost sufficient to say that the reasons assigned by the master for disallowing the items of expense are sufficient and adequate, (See Second Report, p. 85 Record.)

Most of the rejections of items of expense are based upon the theory already explained in connection with 75
the plaintiff's exceptions, *i. e.*, that the defendants were "permitted," by the order of February twenty-eight, one thousand eight hundred and seventy-two, to prove, or attempt to prove, several things; that the burden of proof was upon them to show *what part* of their expenses were "general" expenses, in the sense of the order, and to separate such expenses from the particular expenses, which they alone could do.

They failed to do this as *to any* of *the items* disallowed, and such items are not on their face "general."

They were also "permitted to show what part, if any,

76 of their profits was due to the peculiar mode adopted by them of *producing and regulating the motion of the tremolo.*

This was allowed in consequence of a claim on their part that a part of this profit was due to the adoption of a *wind motor*, and other minor devices, in connection with their tremolo.

The burden of proof was, as before, upon the defendants. On this point they failed to meet it, and produced no proof whatever worthy of the name.

The patents which they said were entitled to share a portion of their profits were not shown to the master, or submitted to him. It is believed the only attempt at
77 evidence was a very vague expression of opinion by witness, John M. Tremaine, of the general excellence of the defendants' form of devices over the plaintiffs'. There was no kind of proof as to what proportion of the profits was due to the defendants' changes of form in their tremolo, and the means of actuating it. Unless this was done definitely the master could not, of course, report anything except what he did.

On the other hand the complainants conclusively proved that no part of the profit was due to the defendants' method of imparting or regulating the motion of the tremolo.

On the contrary, that the highest price in the market was always derived from the tremolo on which the mo-
78 tion was imparted and regulated by clockwork, and not by a wind wheel, as used by the defendants, and that there was no advantage whatever gained or enhanced price received by reason of any of the changes introduced by the defendants.

The exception by the defendants to the rejection of proof by the defendants of testimony tending to show that an enhanced price was received from the use of the rotating slotted cylinder of the Burdett Organ over and above the price that would have been received for the fan should be overruled.

1st. Because the order of February 28th, one thou-

sand eight hundred and seventy-two, and did not allow 79
such proof, proofs being confined to the question, if an enhanced price was received by reason of the adoption by the defendants, of their means "*for imparting and regulating the motion,*" *i.e.*, the wind in the wheels, and bent wire starter.

2nd. Because the proofs directly show the contrary, *i.e.*, that the Burdett cylinder was the recognized inferior of the fan.

The exception of the defendants to the rejection of the affidavits and depositions of three complainants in the Shoningar case should be overruled.

The master has power to regulate the method of taking proof before him, and the Court will not interfere with 80
his discretion in the matter.

See Rules in Equity 77, last part. The master properly exercised his judicial discretion in this case, and refused to allow in evidence, three affidavits of parties *taken in another suit*, and for *another purpose*, especially as the parties were *then present*, and could have been examined if desired by the defendants.

The rules in equity, No. 80, has no application to the present case, it provides merely for the admission of affidavits taken in the *same* suit between the same parties, not in other suits and between different parties.

All of the exceptions of the defendant should therefore be overruled.

81

SIXTH POINT.

It is respectfully submitted that the decree of the Court below should be modified so as to confirm the first report of the master, and award to the complainants the sum of $1,233 48-100 as profits, in addition to the costs and expenses, and so modify it should be affirmed with costs in this Court.

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